GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
STARRED QUESTION NO.325
ANSWERED ON 08.12.2016

POWER PROJECTS

*325. SHRI J.C. DIVAKAR REDDY:

Will the Minister of POWER
be pleased to state:

(a) the number of thermal and hydro power projects in the country and quantum of power produced during the last three years and the current year, source-wise;

(b) the details of power projects in the pipeline and quantum of power likely to be produced by them;

(c) the quantum of domestic and imported coal used for power production in the country during the above period;

(d) whether any assessment has been made of the quantum of imported or domestic coal likely to be used for power production during the next three years and if so, the details thereof; and

(e) the steps taken to augment power availability at household level?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) to (e) : A Statement is laid on the Table of the House.

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STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (e) OF STARRED QUESTION NO.325 ANSWERED IN THE LOK SABHA ON 08.12.2016 REGARDING POWER PROJECTS.

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(a) : As on 31st October, 2016, there are 261 Thermal and 177 Hydro Power projects in the country. The source-wise details of power produced by these plants during the last three years and the current year is given at Annex–I.

(b) : At present, 143 Thermal units having a capacity of 73728.4 MW are in the pipeline and the quantum of power to be produced by these power plants in a year at National Average Plant Load Factor of 59.17% (from April to October 2016) will be 387 BU approximately. The details of the same are given at Annex-II.

At present, there are 44 hydro units having a capacity of 13,182 MW in the pipeline. The quantum of power to be produced by Hydro projects is dependent on availability of water. However, the energy potential of these 44 hydro units is 49.9 BU as per Design Energy. The details of the same are given at Annex–III.

(c) : The quantum of domestic and imported coal consumed for power production, as reported by power plants to the Central Electricity Authority (CEA) during the last three years and the current year is given at Annex-IV.

(d) : The assessment of the quantum of domestic and imported coal based on the generation target is fixed on an annual basis. As per the assessment, 48 MT of imported coal for imported coal based power plants and 552 MT of domestic coal for other power plants would be required to meet the generation target for the year 2016-17.

(e) : The following steps have been taken to augment power availability in the country including at household level:

(i) During the 12th Plan period (2012-17), a capacity addition of about 88928.2 MW against the target of 88537 MW from the conventional sources have been achieved till 31st October, 2016 and about 21,128 MW as against the target of 30000 MW from renewable sources have been achieved till 30th September, 2016.

(ii) Adequate supply of the domestic coal to power plants has been ensured. The growth of domestic coal supply to power plants has been around 6.2% during 2015-16.

.....2.

(iii) During the 12th Plan period (2012-17), 1,00,468 ckm as against the target of 1,07,440 ckm of transmission lines and 2,88,458 MVA as against the target of 2,82,750 MVA of transformation capacity have been completed till 31st October, 2016.

(iv) The Government of India has taken an initiative to prepare State specific Action Plans for providing 24X7 Power For All (PFA) in partnership with the States.

(v) Two new schemes have been launched by the Government of India, namely, Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Integrated Power Development Scheme (IPDS) for strengthening of sub-transmission and distribution networks and for segregation of agricultural feeders to give adequate and reliable supply and reduce line losses.

(vi) The Government of India has taken several steps to promote energy conservation, energy efficiency and other demand side management measures.

(vii) The Central Government has notified Ujjwal Discom Assurance Yojana (UDAY) scheme on 20.11.2015 for Operational & Financial Turnaround of DISCOMs.

(viii) Government of India has taken steps for expeditious resolution of issues relating to Environmental and forest clearances for facilitating early completion of generation and transmission projects.

(ix) The Government of India has launched a scheme by providing support from Power System Development Fund (PSDF) for operationalisation of stranded gas based generation.

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ANNEX-I

ANNEX REFERRED TO IN PART (a) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 325 ANSWERED IN THE LOK SABHA ON 08.12.2016 REGARDING POWER PROJECTS.

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Category	Fuel	Generation Million Units (MU)			
		2016-17 (upto-Oct. 16)*	2015-16	2014-15	2013-14
HYDRO		93215.45	126621	134251.4	140445.4
THERMAL	COAL	518947.3	862015.3	800333.9	713847.1
	DIESEL	169.76	405.92	1407.42	1868.17
	HIGH SPEED DIESEL	0	0	0	0
	LIGNITE	19897.78	34244.44	35503.68	32239.69
	MULTI FUEL	0	0	0	0
	NAPTHA	21.28	151.47	989.29	1562.91
	NATURAL GAS	29812.4	46970.62	40085.76	42959.27
	Total	568848.6	943787.7	878320	792477.1

* PROVISIONAL BASED ON ACTUAL-CUM-ASSESMENT

Note:

1. Generation from plants 25 MW & above capacity (from conventional sources i.e.hydro, thermal and nuclear) only.

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ANNEX-II

ANNEX REFERRED TO IN PART (b) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 325 ANSWERED IN THE LOK SABHA ON 08.12.2016 REGARDING POWER PROJECTS.

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Details of Under Construction Thermal Power Projects in the country

Sl. No.	State	Project Name	Unit No	Cap. (MW)
	CENTRAL SECTOR			
1	*Assam*	Bongaigaon TPP	U-2	250
			U-3	250
2	*Bihar*	Barh STPP-I	U-1	660
			U-2	660
			U-3	660
3	*Bihar*	Muzaffarpur TPP(Kanti) Exp	U-4	195
4	*Bihar*	Nabi Nagar TPP	U-2	250
			U-3	250
			U-4	250
5	*Bihar*	New Nabi Nagar TPP	U-1	660
			U-2	660
			U-3	660
6	*Chhatisgarh*	Lara TPP	U-1	800
			U-2	800
7	*Jharkhand*	North Karanpura TPP	U-1	660
			U-2	660
			U-3	660
8	*Karnataka*	Kudgi STPP Ph-I	U-1	800
			U-2	800
			U-3	800
9	*Maharashtra*	Mouda STPP Ph-II	U-4	660
10	*Maharashtra*	Solapur STPP	U-1	660
			U-2	660
11	*MP*	Gadarwara TPP	U-1	800
			U-2	800
12	*MP*	Khargone TPP	U-1	660
			U-2	660
13	*Odisha*	Darlipalli STPP	U-1	800
			U-2	800
14	Telangana	Telangana Ph- I	U-1	800
			U-2	800
15	*TN*	Neyveli New TPP	U-1	500
			U-2	500
16	*UP*	Unchahar - IV	U-6	500
17	*UP*	Meja STPP	U-1	660
			U-2	660
18	*UP*	Ghatampur TPP	U-1	660
			U-2	660
			U-3	660
19	*UP*	Tanda TPP	U-1	660
			U-2	660
	TOTAL CENTRAL SECTOR			25605
	STATE SECTOR			
1	*A.P*	Dr.Narla Tata Rao TPS St-V	U-1	800
2	A.P	Sri Damodaran Sanjeevaiah TPP St-II	U-1	800
3	*AP*	Rayalaseema TPP St-IV	U-6	600

4	*Assam*	Namrup CCGT	GT	62.25
			ST	36.15
5	*Bihar*	Barauni TPS Extn	U-8	250
			U-9	250
6	*Gujarat*	Bhavnagar CFBC TPP	U-2	250
7	*Gujarat*	Wanakbori TPS Extn.	U-8	800
8	*Karnataka*	Yermarus TPP	U-2	800
9	*Karnataka*	Yelahanka CCPP BY KPCL	U-1	370
10	*Maharashtra*	Koradi TPS Expn	U-10	660
11	*MP*	Shri Singhaji TPP St-II	U-3	660
			U-4	660
12	*Odisha*	Ib valley TPP	U-3	660
			U-4	660
13	*Rajasthan*	Chhabra TPP Extn	U-5	660
			U-6	660
14	*Rajasthan*	Suratgarh SCTPP	U-7	660
			U-8	660
15	*Telangana*	Kothagudem TPS St-VII	U-1	800
16	*Telangana*	Bhadradri TPP	U-1	270
			U-2	270
			U-3	270
			U-4	270
17	*Telangana*	Singareni TPP	U-2	600
18	*TN*	Ennore exp. SCTPP (Lanco)	U-1	660
19	*TN*	Ennore SCTPP	U-1	660
			U-2	660
20	*TN*	North Chennai TPP St-III	U-1	800
21	*TN*	Uppur Super Critical TPP	U-1	800
			U-2	800
22	*UP*	Harduaganj TPS Exp-II	U-1	660
23	*WB*	Sagardighi TPP St-II	U-4	500
	Total State Sector			18978.4
	PRIVATE SECTOR			
1	*AP*	Bhavanapadu TPP Ph-I	U-1	660
			U-2	660
2	*AP*	SGPL TPP	U-2	660
3	*AP*	Thamminapatnam TPP stage -II	U-3	350
			U-4	350
4	Bihar	Jas Infra. TPP	U-1	660
			U-2	660
			U-3	660
			U-4	660
5	*Chhattisgarh*	Akaltara TPP	U-3	600
			U-4	600
			U-5	600
			U-6	600
6	*Chhattisgarh*	Binjkote TPP	U-1	300
			U-2	300
			U-3	300
			U-4	300
7	*Chhattisgarh*	Lanco Amarkantak TPP-II	U-3	660
			U-4	660
8	*Chhattisgarh*	Singhitarai TPP	U-1	600
			U-2	600
9	*Chhattisgarh*	Nawapara TPP	U-2	300
10	*Chhattisgarh*	Uchpinda TPP	U-3	360
			U-4	360
11	*Chhattisgarh*	Salora TPP	U-2	135
12	*Chhattisgarh*	Deveri (Visa) TPP	U-1	600

13	*Jharkhand*	Matrishri Usha TPP Ph-I	U-1	270
			U-2	270
14	*Jharkhand*	Matrishri Usha TPP Ph-II	U-3	270
			U-4	270
15	*Jharkhand*	Tori TPP Ph-I	U-1	600
			U-2	600
16	*Jharkhand*	Tori TPP Ph-II	U-3	600
17	*Maharashtra*	Amravati TPP Ph-II	U-1	270
			U-2	270
			U-3	270
			U-4	270
			U-5	270
18	*Maharashtra*	Lanco Vidarbha TPP	U-1	660
			U-2	660
19	*Maharashtra*	Nasik TPP Ph-I	U-2	270
			U-3	270
			U-4	270
			U-5	270
20	*Maharashtra*	Nasik TPP Ph-II	U-1	270
			U-2	270
			U-3	270
			U-4	270
			U-5	270
21	*Maharashtra*	Bijora Ghanmukh TPP	U-1	300
			U-2	300
22	*MP*	Mahan TPP	U-2	600
23	*MP*	Gorgi TPP	U-1	660
24	*MP*	Niwari TPP	U-2	45
25	*Odisha*	Ind Barath TPP	U-2	350
26	*Odisha*	KVK Nilanchal TPP	U-1	350
			U-2	350
			U-3	350
27	*Odisha*	Lanco Babandh TPP	U-1	660
			U-2	660
28	*Odisha*	Malibrahmani TPP	U-1	525
			U-2	525
29	*TN*	Tuticorin TPP (Ind- Barath)	U-1	660
30	*TN*	Tuticorin TPP St-IV	U-1	525
31	*UP*	Prayagraj (Bara) TPP Siemens	U-3	660
32	*WB*	India Power TPP	U-1	150
			U-2	150
			U-3	150
	Total Private Sector			29145
	Grand Total			73728.4

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ANNEX-III

ANNEX REFERRED TO IN PART (b) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 325 ANSWERED IN THE LOK SABHA ON 08.12.2016 REGARDING POWER PROJECTS.

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List of under construction Hydro projects (above 25 MW) – Sector wise

Sl. No.	Name of Project	Unit No.	Capacity (MW)
	Central Sector		
1	Kishanganga 3x110= 330 MW	U-1 to U-3	330
2	Parbati St. II 4x200= 800 MW	U-1 to U-4	800
3	Tapovan Vishnugad 4x130=520 MW	U-1 to U-4	520
4	Tehri PSS 4x250= 1000 MW	U-1 to U-4	1000
5	Lata Tapovan 3x57= 171 MW	U-1 to U-3	171
6	Vishnugad Pipalkoti 4x111= 444 MW	U-1 to U-4	444
7	Subansiri Lower 8x250= 2000 MW	U-1 to U-8	2000
8	Kameng 4x150= 600 MW	U-1 to U-4	600
9	Pare 2x55= 110 MW	U-1 to U-2	110
10	Tuirial 2x30= 60 MW	U-1 to U-2	60
11	Rammam III 3x40=120 MW	U-1 to U-3	120
			6155
	State Sector		
12	Shahpurkandi 3x33+3x33+1x8= 206 MW	U-1 to U-7	206
13	Uhl-III 3x33.33= 100 MW	U-1 to U-3	100
14	Kashang-II & III 1x65 + 1x65= 130 MW	U- 2	65
15	Sainj 2X50=100 MW	U- 1 & U- 2	100
16	Sawra Kuddu 3x37= 111 MW	U-1 to U-3	111
17	Shongtong Karcham 3x150= 450 MW	U-1 to U-3	450
18	Vyasi 2X60=120 MW	U- 1 & U- 2	120
19	Koyna Left Bank PSS 2x40= 80 MW	U-1 to U-2	80
20	Nagarujana Sagar TR 2x25= 50 MW	U-1 & U-2	50
21	Polavaram 12x80= 960 MW	U-1 to U-12	960
22	Pulichintala 4x30= 120 MW	U-2 to U-4	90
23	Pallivasal 2x30= 60 MW	U-1 to U-2	60
24	Thottiyar 1x30 + 1x10= 40 MW	U-1 to U-2	40
25	New Umtru 2x20= 40 MW	U-1& U-2	40
26	Teesta- III 6x200= 1200 MW	U-1 to U-6	1200
			3672
	Private Sector		
27	Ratle 4x205+1x30= 850 MW	U-1 to U-5	850
28	Sorang 2x50= 100 MW	U-1 & U-2	100
29	Tangnu Romai- I 2x22= 44 MW	U-1 to U-2	44
30	Bajoli Holi 3x60= 180 MW	U-1 to U-3	180
31	Chanju-I 3x12= 36 MW	U-1 to U-3	36
32	Tidong-I 2x50= 100 MW	U-1 to U-2	100
33	Phata Byung 2x38= 76 MW	U-1 to U-2	76
34	Singoli Bhatwari 3x33= 99 MW	U-1 to U-3	99
35	Maheshwar 10x40= 400 MW	U-1 to U-10	400
36	Teesta- VI 4x125= 500 MW	U-1 to U-4	500
37	Rangit-IV 3x40= 120 MW	U-1 to U-3	120
38	Bhasmey 2x25.5= 51 MW	U-1 to U-2	51
39	Tashiding 2x48.5= 97 MW	U-1 to U-2	97
40	Dikchu 2x48= 96 MW	U-1 to U-2	96
41	Rangit-II 2x33= 66 MW	U-1 to U-2	66
42	Rongnichu 2x48= 96 MW	U-1 to U-2	96
43	Panan 4x75= 300 MW	U-1 to U-4	300
44	Gongri 2x72= 144 MW	U-1 to U-2	144
			3355
Total			13182

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ANNEX-IV

ANNEX REFERRED TO IN PART (c) OF THE STATEMENT LAID IN REPLY TO STARRED QUESTION NO. 325 ANSWERED IN THE LOK SABHA ON 08.12.2016 REGARDING POWER PROJECTS.

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The quantum of domestic and imported coal consumed for power production, during the last three years and the current year

(Figures in Million Tonnes (MT)

	2013-14	2014-15	2015-16	2016-17 (April-Oct.)
Domestic Coal	409.4	439.2	465.3	290.2
Imported Coal	80.0	91.2	80.6	40.0

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3721
ANSWERED ON 08.12.2016

DISTRIBUTION OF SURPLUS POWER

3721. SHRIMATI KOTHAPALLI GEETHA:

Will the Minister of POWER
be pleased to state:

(a) whether the Government of Telangana has submitted a proposal to avail the power produced at Dadri and Jhajjar power plants as the Delhi Government proposes to surrender the surplus power of 2,255 MW of electricity provided by 11
Central Government power plants;

(b) if so, the details thereof; and

(c) the present status of the proposal?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) to (c) : Government of National Capital Territory of Delhi, in their letter dated 6th July, 2015, requested for surrender of 2,255 MW power from 11 different power stations.

As requested by Government of Telangana and depending on the availability of Inter regional transmission corridor towards Southern Region, 374 MW from Aravali Power Company Private Limited (APCPL), Jhajjar was allocated till 31.03.2016. Further 100 MW from APCPL, Jhajjar was allocated during 01.04.2016 to 31.05.2016.

At present, there is no request from Government of Telangana to avail power from Dadri and APCPL Jhajjar.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3726
ANSWERED ON 08.12.2016

POWER TO BANGLADESH

3726. SHRI RAJESHBHAI CHUDASAMA:

Will the Minister of POWER
be pleased to state:

(a) whether Bangladesh has sought more power from our country to meet its rising demand;

(b) if so, the details thereof including the details of quantum of power Bangladesh seeks to purchase from the country;

(c) the quantum of power supplied to that country presently; and

(d) the details of current weighted average tariff of Bangladesh's power purchase?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) & (b) : Power is supplied to Bangladesh under the Memorandum of Understanding (MoU) between India and Bangladesh. Bangladesh have sought additional 60 MW power for meeting it’s demand in the Eastern part of Bangladesh.

(c) : During the current year 2016-17 (April – November, 2016), the electricity energy supplied to Bangladesh was about 2991 Million Units.

(d) : The tariff of 250 MW power from Central Generating Station being supplied to Bangladesh is as per the norms determined by the Central Electricity Regulatory Commission (CERC). The weighted average tariff of remaining power is around Rs.5.35 per unit. In addition to this, Bangladesh also pays the transmission charges and other grid related operation charges as per the CERC regulations.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3731
ANSWERED ON 08.12.2016

COMPLETION OF POWER PROJECT

†3731. SHRIMATI SAKUNTALA LAGURI:

Will the Minister of POWER
be pleased to state:

(a) the details of power projects completed by the Union Government during the last three years particularly in the State of Odisha;

(b) whether the Union Government has assessed the annual supply of power to Odisha from central generating stations, if so, the details thereof; and

(c) the details of central projects for the State which have not been completed on time and the reasons therefor, project-wise?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) : The details of central sector thermal and hydro power projects commissioned by the Union Government in the country including Odisha during the last three years is given at Annex-I & Annex-II respectively.

(b) : The present allocation of power from the Central Generating Stations (CGS), including supply from Bhutan to the State of Odisha, is given below:

(In MW)

A. Firm Allocation	Capacity
(i) Firm share	1228
(ii) Share from dedicated stations	460
Total Firm Share to Odisha	1688
B. Allocation from Unallocated Power of Eastern Region CGS	62
TOTAL ALLOCATION TO ODISHA FROM CGS	1750

(c) : No Central Sector Thermal, Hydro power projects have been commissioned in Odisha during the last three years. However, one Central Sector Thermal Power Project of NTPC Ltd., namely Darlipalli STPP Stage-I (2x800 MW), is presently under construction in Odisha which is likely to be scheduled for commissioning in 2018-19.

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ANNEX-I

ANNEX REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 3731 ANSWERED IN THE LOK SABHA ON 08.12.2016.

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Details of central sector thermal power projects commissioned during last three years and current year.

Sl. No	State	Project Name	Unit No	Actual capacity added (MW)
2013-14				
1	Bihar	Barh STPP-II	4	660
2	Tamil Nadu	Vallur TPP-II	3	500
3	Uttar Pradesh	Rihand STPS- III	6	500
2014-15				
4	Bihar	Barh STPP-II	5	660
5	Bihar	Muzaffarpur TPP Extn	3	195
6	Tamil Nadu	Neyveli TPS-II EXP	2	250
7	Tamil Nadu	Tuticorin TPP	1	500
8	Tripura	Tripura Gas	Module-2	363.3
9	Tripura	Monarchak Gas Power Project	GT	65.4
10	Tripura	Agartala CCPP	ST-2	25.5
11	West Bengal	Raghunathpur TPP Ph-I	1	600
2015-16				
12	Assam	Bongaigaon TPP	1	250
13	Madhya Pradesh	Vindhyachal TPP-V	13	500
14	Tripura	Monarchak CCPP	ST	35.6
15	Tamil Nadu	Tuticorin TPP	2	500
16	West Bengal	Raghunathpur TPP, Ph-I	2	600
17	Jharkhand	Bokaro TPS "A" Exp.	1	500
18	Bihar	Nabi Nagar TPP	1	250
19	Maharashtra	Mouda STPP-II	3	660
2016-17				
20	Tripura	Agartala Gas Based Power Project	ST-1	25.5

ST : Steam Turbine, GT : Gas Turbine

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ANNEX-II

ANNEX REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 3731 ANSWERED IN THE LOK SABHA ON 08.12.2016.

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List of Hydro Electric Projects commissioned (Central sector) during last three years and current year

Commissioned During 2013-14				
Sl No	State	Project Name	Unit No	Capacity MW
1	West Bengal	Teesta Low Dam-III(4x33)	4	33
2	Jammu & Kashmir	Uri-II(4x60)	1,2,3,4	240
3	Jammu & Kashmir	Nimoo Bazgo (3x15)	1,2,3	45
4	Himachal Pradesh	Parabati-III (4x130)	1,2,3	390
5	Himachal Pradesh	Rampur (6x68.67)	1,2,5	206
Commissioned During 2014-15				
6	Himachal Pradesh	Parabati-III (4x130)	4	130
7	Himachal Pradesh	Rampur (6x68.67)	3,4,6	206
8	Himachal Pradesh	Kol Dam (4x200)	1,2	400
Commissioned During 2015-16				
9	Himachal Pradesh	Kol Dam (4x200)	3,4	400
10	West Bengal	Teesta Low dam-IV (4x40)	1,2	80
Commissioned During 2016-17				
11	West Bengal	Teesta Low dam-IV (4x40)	3,4	80

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3734
ANSWERED ON 08.12.2016

ENERGY COOPERATION IN SAARC

3734. DR. SHASHI THAROOR:
ADV. CHINTAMAN NAVASHA WANAGA:

Will the Minister of POWER
be pleased to state:

(a) the details of the regional cooperation on electricity trade with the South Asian Association for Regional Cooperation (SAARC), which will encourage cross-border power supply and strengthen energy security;

(b) whether the Government is exploring measures to export and import power from neighbouring countries such as Myanmar, Bangladesh and Pakistan;

(c) if so, the details thereof, country-wise;

(d) whether the Union Government has taken measures to strengthen the existing transmission infrastructure, to enable greater cross-border energy trade and to enhance energy-security of the country; and

(e) if so, the details thereof and if not, the reasons therefor?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) to (c): For regional cooperation on electricity trade, India has signed Memorandum of Understanding/Power Trade Agreement with Bangladesh, Bhutan, Myanmar and Nepal. The SAARC Framework Agreement for Energy Cooperation (Electricity) has also been signed by all the SAARC countries including India. The country-wise details of import/export of power to neighbouring countries during the current year 2016-17 (upto November, 2016) is given at Annex.

(d) & (e) : To enable greater cross border energy trade and to enhance energy security of the country, Government has issued the guidelines on Cross Border Trade of Electricity on 5.12.2016. Further, India with its neighbouring countries are also planning to strengthen the transmission infrastructure. The future transmission links with neighbouring countries are decided in the Joint Steering Committee/Joint Working Group between India and its neighbouring countries.

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ANNEX

ANNEX REFERRED TO IN REPLY TO PARTS (a) TO (c) OF UNSTARRED QUESTION NO. 3734 ANSWERED IN THE LOK SABHA ON 08.12.2016.

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Export/Import of Electricity with neighbouring countries
during the year 2016-17 (upto November, 2016)

	Energy (Million Units)
Export to Bangladesh	2911
Export to Nepal	1163
Import from Bhutan	5261

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3739
ANSWERED ON 08.12.2016

GAP BETWEEN DEMAND AND SUPPLY

3739. SHRI B. SRIRAMULU:
SHRI SADASHIV LOKHANDE:

Will the Minister of POWER
be pleased to state:

(a) whether the gap between the demand and supply of power in the country can be bridged by optimum utilisation of the power generation capacity of the hydel power sector and if so, the details thereof and the stand of the Government in this regard;

(b) whether the construction work of hydel power projects in the country is facing a number of bottlenecks, both natural and man-made;

(c) if so, the details thereof and the steps being taken by the Government to remove these bottlenecks;

(d) whether the operational time period of the hydel power projects have been extended for increasing power generation and accordingly their status have been upgraded and if so, the details thereof for the last three years, project and State-wise;

(e) whether the Government proposes to frame a hydel power policy to meet the increasing demand for power and if so, the details thereof; and

(f) the other steps being taken by the Government to augment power generation capacity of the hydel power projects?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) : Yes, Madam. The gap between demand and supply of power during the current year 2016-17 (April-October, 2016) in terms of energy is only 0.7%. One of the factors leading to this marginal demand - supply gap is the optimum utilization of generation capacity of the hydro power sector. Hydro Power Plants are optimally used during peak hours taking into consideration water availability, irrigation requirements etc.

.....2.

(b) & (c) : Yes, Madam. Hydel power projects face a number of bottlenecks, both natural and man-made. The major natural bottlenecks encountered in hydel power projects are natural calamities, geological uncertainties, difficult terrain & poor accessibility, etc. The major manmade bottlenecks relate to land acquisition problems, local agitations / resistance including rehabilitation & resettlement issues, funds constraints, etc.

(d) : There is no proposal to increase the operational time period of the hydro electric projects.

(e) & (f) : A number of remedial measures have been undertaken by the Government to fully harness the hydropower potential in the country viz., provision of debt financing of longer tenure under National Electricity Policy, option of charging lower rate of depreciation vis-a-vis Central Electricity Regulatory Commission (CERC) norms, extending cost plus tariff regime for public and private sector hydro projects up to 15.08.2022 in Revised Tariff Policy, excluding hydro power from Renewable Purchase Obligation etc.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3746
ANSWERED ON 08.12.2016

ENERGY POLICY

3746. DR. BOORA NARSAIAH GOUD:

Will the Minister of POWER
be pleased to state:

(a) aims and objectives of proposed Energy Policy;

(b) the extent to which the new policy is different from the existing policy;

(c) whether the Ministry of Coal has any reservations over this policy and if so, the reasons therefor;

(d) whether NITI Aayog has proposed to align domestic coal prices with international prices; and

(e) if so, the reasons therefor including the advantages and disadvantages of the proposal?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) : The National Energy Policy (NEP) aims to chart the way forward to meet the Government's bold announcements in the energy domain. The aims and objectives of the NEP are as under:

Aims: (i) All the Census villages are planned to be electrified by the year 2019, and universal electrification is to be achieved, with 24x7 electricity by the year 2022, (ii) To reduce emission intensity per unit GDP by 33% to 35% by the year 2030 as per Intended Nationally Determined Contributions (INDCs) (iii) achieving a 175 GW renewable energy capacity by the year 2022, and (iv) share of non-fossil fuel based capacity in the electricity mix that is aimed at above 40% by the year 2030.

.....2.

Objectives: (i) Access at affordable prices, (ii) improved energy security and Independence, (iii) Greater Sustainability and (iv) Economic Growth.

(b) : The NEP builds on the achievements of the earlier omnibus energy policy – the Integrated Energy Policy (IEP), and sets the new agenda consistent with the redefined role of emerging developments in the energy world. The new draft policy differs from the previous policy by the issues related to sharp decline of crude oil prices, advances in solar energy technology, heightened concern of climate change, ambitious target of Renewable energy and rural electrification agenda adopted by the Government.

(c) : In view of the fact, that energy is handled by different Ministries that have the primary responsibility of setting their own sectoral agenda, an omnibus policy is required to achieve the goal of energy security through coordination between these sources. NITI Aayog has been preparing the NEP in consultation with different stakeholders including the Ministry of Coal.

(d) & (e) : NITI Aayog is of the view that the proposed policy does not call for alignment of domestic coal prices with the international prices.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3747
ANSWERED ON 08.12.2016

ELECTRICITY PLAN

3747. KUMARI SHOBHA KARANDLAJE:

Will the Minister of POWER
be pleased to state:

(a) whether Central Electricity Authority (CEA) is working on an Electricity Plan for the next 5 years, which will try to gauge the demand for power in the country;

(b) if so, the aims and objectives of this plan;

(c) the estimated capacity addition of power for 12th plan period and the achievements made so far, source-wise;

(d) the steps being initiated by the Union Government on standards for construction, operation and maintenance of power equipments for renewable electricity systems for grid stability; and

(e) whether it is a fact that as per the 12th Plan, 40 per cent of power projects were super critical and if so, the details thereof?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) : For estimating the electricity demand of all the States/UT's, Regions and for the country, the Central Electricity Authority (CEA) periodically carries out Electric Power Survey. The 18th Electric Power Survey (EPS) Report, the latest in the series of EPS, was published in December, 2011. To reassess the demand for power in the country for the next five years and beyond, the 19th Electric Power Survey Committee (EPSC) has been constituted by the CEA.

.....2.

(b) : As per the National Electricity Policy 2005, the National Electricity Plan would include:

(i) Short-term and long term demand forecast for different regions;

(ii) Suggested areas/locations for capacity additions in generation and transmission keeping in view the economics of generation and transmission, losses in the system, load centre requirements, grid stability, security of supply, quality of power including voltage profile etc. and environmental considerations including rehabilitation and resettlement;

(iii) Integration of such possible locations with transmission system and development of national grid including type of transmission systems and requirement of redundancies; and

(iv) Different technologies available for efficient generation, transmission and distribution.

(v) Fuel choices based on economy, energy security and environmental considerations.

(c) : The likely generation capacity addition from the conventional sources during the 12th Plan period (2012-17) is 1,02,811 MW as against the target of 88537 MW.

As on 31.10.2016, the Capacity addition achieved, so far, from conventional sources during the 12th Plan period is 88928.2 MW, comprising of 4140.02 MW from Hydro, 83788.2 MW from Thermal and 1000 MW from Nuclear.

(d) : With a view to ensuring maintenance of grid stability subsequent to connection of a renewable energy generator, steps have been taken to amend the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 (as amended in 2013). These regulations lay down certain Technical/operational requirements to be met by different kinds of generators including the renewable energy generators seeking connectivity with the grid. The draft amendment to the aforesaid regulations has been published on the CEA website on 08.11.2016 and comments thereon have been invited from members of public till 31.12.2016.

(e) : During the current plan period (2012-17), power generating capacity based on super critical technology is likely to be 35,890 MW which is around 41.0% of the total likely coal based capacity addition of 86,750 MW during the same period.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3758
ANSWERED ON 08.12.2016

SYSTEM TO PROTECT POWER GRIDS FROM CYBER ATTACK

3758. SHRI PRABHAKAR REDDY KOTHA:

Will the Minister of POWER
be pleased to state:

(a) whether the Government is planning to evolve a system to protect the power grids in the country from Cyber attacks and implement a security management system, if so, the details thereof;

(b) whether installation of supervisory control and data acquisition system for power distribution contracts are largely with Chinese companies instead of Indian companies and if so, the details thereof and the reasons therefor; and

(c) the steps being taken by the Government to regulate the contract award system to reduce the Chinese domination and to increase the role of indigenous contractors as per the ideals of Make in India Policy?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) : Yes, Madam. Systems are already in place for protecting the power grids in the country from cyber attacks. Rule 8(2) of the Information Technology (reasonable security practices and procedures and sensitive personal data or information) Rules, 2011 framed under clause 87(2)(ob) of the Information Technology Act, 2000, mandate compliance to Information Security Management System. Critical setups at POWERGRID and POSOCO have been certified for Information Security Management System (ISMS) Standard. Ministry of Power has also constituted CERT-Thermal, CERT-Hydro and CERT-Transmission (Computer Emergency Response Teams) with nodal agencies as NTPC, NHPC and PGCIL respectively, to safeguard against cyber attacks.

(b) : Security of electric infrastructure is ensured by the concerned utility. The contracts for Supervisory Control and Data Acquisition (SCADA) are done by the concerned States/Utilities. As per the information available with the Central Electricity Authority (CEA), a Chinese company named Dongfang Electronics Company Ltd., China, in association with Indian partner, has been awarded SCADA implementation contracts in Madhya Pradesh, Odisha, Puducherry, Rajasthan and Tamil Nadu.

(c) : The CEA, Ministry of Power had issued an advisory/guidelines pertaining to Power Transmission & Distribution/Switchyard equipment to state power utilities & Public Sector Utilities (PSUs). In the absence of domestic manufacturing capability, the foreign suppliers are allowed in Government tenders to form consortium/Joint Venture with an Indian bidder and establish a manufacturing facility in India within a specific time frame and ensure transfer of technology in a phased manufacturing programme.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3763
ANSWERED ON 08.12.2016

5 STAR RATED CEILING FANS

3763. SHRIMATI RAKSHATAI KHADSE:

Will the Minister of POWER
be pleased to state:

(a) whether the Union Government proposes to launch another scheme to provide energy efficient 5 star rated 5 watts ceiling fans to the households and businesses on a very small easy to pay EMIs thus saving power consumption and the electricity bills; and

(b) if so, the details thereof?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) & (b) : There is no proposal to launch a scheme to provide energy efficient 5 star rated 5 watts ceiling fans to the households and businesses. However, Energy Efficiency Services Limited (EESL), a joint venture company of Public Sector Undertakings (PSUs) under the Ministry of Power has launched the Energy Efficient Fan Programme on 7th April 2016 from Andhra Pradesh to replace conventional 75 Watt fans with 50 Watt 5-star rated energy efficient fans. These Energy Efficient fans are being provided at Rs.1,100 per unit on upfront payment and at Rs.1,250 in Equated Monthly Instalments (EMI). The EMI is adjusted against the electricity bills of the consumers.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3767
ANSWERED ON 08.12.2016

NATIONAL GRID MISSION

3767. SHRI C.S. PUTTA RAJU:

Will the Minister of POWER
be pleased to state:

(a) whether the Union Government has asked all the State Governments to provide an action plan for implementation of National Grid Mission, if so, the details thereof;

(b) the details of States which have responded in this regard and the number of projects sent by the State Governments;

(c) whether Government has also initiated projects under this Mission; and

(d) if so, the details thereof and the financial implications of the Mission?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) to (d) : No, Madam. There is no 'National Grid Mission' programme under Ministry of Power. However, 'National Smart Grid Mission' (NSGM) has been launched by Government of India in March, 2015. Funds allocated for NSGM were Rs. 40 crore and Rs. 30 crore for the years 2015-16 and 2016-17 respectively.

So far, Smart Grid Projects for 4 cities having an estimated cost of Rs.577.35 Cr. have been sanctioned under NSGM as per details given below:

Sl. No.	City	Estimated project cost (Rs. in crore)
1	Amravati (Maharashtra)	90.05
2.	Congress Nagar (Nagpur)	139.15
3.	Chandigarh	28.58
4.	Kanpur	319.57

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3773
ANSWERED ON 08.12.2016

24X7 POWER FOR ALL

3773. SHRI KANWAR SINGH TANWAR:

Will the Minister of POWER
be pleased to state:

(a) whether the Union Government has taken an initiative to prepare State specific Action Plans for providing 24x7 power for all in partnership with the State Governments;

(b) if so, the details thereof;

(c) whether there are any financial constraints in this regard; and

(d) if so, the measures being taken/ proposed to be taken by the Union Government in this regard?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) & (b) : Supply of continuous and reliable power is the responsibility of the respective State/Power Utilities. However, the Government of India has taken up a joint initiative with all the States/UTs for preparation of State specific documents for providing 24x7 power supply to all and adequate supply of power to agricultural consumers as per State policy. 24x7 Power for All document has been signed with all the States/UTs except Uttar Pradesh and Tamil Nadu.

(c) & (d) : Under the '24X7 Power For All' initiative, there is no separate grant from Union Government for the States / Union Territories. However, the Government of India supplements the States with schemes such as Ujwal DISCOM Assurance Yojana (UDAY), Integrated Power Development Scheme (IPDS) and Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) to help them to achieve the objective. Also States may arrange the required funds from their own grant or from financial institutions.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3777
ANSWERED ON 08.12.2016

BUREAU OF ENERGY EFFICIENCY

3777. SHRI BHAGWANTH KHUBA:

Will the Minister of POWER
be pleased to state:

(a) whether Bureau of Energy Efficiency has issued any guidelines for testing efficiency of domestically manufactured electrical products; and

(b) if so, the details thereof?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) & (b) : No guidelines have been issued by the Bureau of Energy Efficiency (BEE) for testing efficiency of domestically manufactured electrical products. However, the products covered under the BEE's Standards & Labelling (S&L) programme use relevant testing standards of electrical products for energy efficiency testing, defined by Bureau of Indian Standards (BIS)/International Organization for Standardization (ISO)/International Electro technical Commission (IEC). In order to authenticate the testing procedure, all manufacturers registered under the S&L programme are asked to submit all relevant tests reports carried out in the laboratories accredited by National Accreditation Board for Testing & Calibration Laboratories (NABL) or International Laboratory Accreditation Cooperation (ILAC) or Asia Pacific Laboratory Accreditation Cooperation (APLAC).

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3780
ANSWERED ON 08.12.2016

ENVIRONMENTAL PERFORMANCE OF THERMAL POWER PLANTS

3780. SHRIMATI POONAM MAHAJAN:

Will the Minister of POWER
be pleased to state:

(a) whether any measures/initiatives were taken by the Union Government for improving the environmental performance of coal based power stations in the country, if so, the details thereof;

(b) whether any initiatives are proposed to be taken for implementing Clean Development Mechanism (CDM) recommended by TERI recently, if so, the details thereof;

(c) whether all power plants in the country have taken afforestation projects in he nearby areas of the plant for protecting the environment, if so, the details thereof; and

(d) whether any pollution control strategies are followed by the power plants for safer environment, if so, the details thereof?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) : Following measures are taken for improving the environmental performance of Coal based thermal power plants:

I. All thermal power plants require prior environmental clearance from the concerned regulatory authority-Ministry of Environment, Forests & Climate Change (MoEF&CC) or the State Environment Impact Assessment Authority (SEIAA) as the case may be, before initiating activities related to establishment of the power plant.

II. Coal based capacity addition during the 13th Plan period shall be only through super-critical units. Adoption of supercritical technology would help in reduction in per unit emission of particulate matter, SO_2, NOx& CO_2.

III. Phased retirement of in-efficient and old thermal power generation units has also been taken up. A capacity of about 6010 MW has already been retired as on 31.10.2016.

IV. To facilitate State Utilities/IPPs to replace old & inefficient coal based thermal units with more efficient supercritical units, the Government of India has formulated a policy of automatic transfer of Coal linkage granted to old plants to new super-critical units.

V. Coal cess has been increased from Rs.200/ton to Rs.400/ton to enhance the National Clean Energy Fund (NCEF) to be utilized for promoting clean electricity production that includes renewable sources.

VI. Perform, Achieve & Trade (PAT) Scheme, introduced in 2012, has resulted in improving unit heat rate of thermal units and thereby reduction in emissions.

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VII. The norms for emissions/effluents from thermal power plants have been revised by MoEF&CC by imposing stringent emission standards for particulate matter and imposing limits for gaseous emission of SO_2 and NOx and water consumption vide notification dated 07/12/2015.

VIII. Directions have been issued by the Central Pollution Control Board under section 18(1) b of Water & Air Acts to the State Pollution Control Boards and Pollution Control Committees for directing 17 categories of highly polluting industries including thermal power plants for installation of online effluent quality and common emission monitoring systems to help track compliance of the discharges of pollutants from these units.

IX. The Government of India has notified the Tariff Policy on 28th January, 2016, which mandates that the thermal power plant(s) including the existing plants, located within 50 km radius of sewage treatment plant of Municipality/local bodies/similar organization shall, in the order of their closeness to the sewage treatment plant, mandatorily use treated sewage water produced by these bodies and the associated cost on this account be allowed as a pass through in the tariff.

(b) : Clean Development Mechanism (CDM) Works on Frameworks and Rules finalized under the United Nations Framework Convention on Climate Change (UNFCCC). Article 6 of the Paris Agreement deals with market mechanism.

(c): (i) All the power plants have commitment to the protection of the environment and maintaining the ecological balance. One of the main thrust areas in this mission is afforestation. Thermal Power Plants (TPPs) undertake afforestation in and around the plant areas (township, green-belt around plant periphery etc.).

(ii) The Govt. of India, Ministry of Power, has introduced the National Environment Management Award since 2008-09 for Coal/Lignite based Thermal Power Plants. Afforestation is one of the key environmental parameters for selection of an Awardee.

(d) : Following measures are taken by Thermal Plants to control Pollution:-

(i) High efficiency Electrostatic Precipitators (ESPs) are installed to capture Particulate Matters (Fly ash) from flue gases.

(ii) Low NO_X burners are used for reducing NOx emission from flue gases.

(iii) SO_2 emission control achieved through dispersion of flue gases from tall stacks (275 metres) in large size units of 500 MW and above. In sensitive areas, the FGD plants have also been installed as prescribed by MOEF&CC.

(iv) Effluent Treatment Plant is installed in all Thermal Power Plants for treatment of effluents generated from different processes to maintain proper quality of Liquid/Water to be recycled/used for horticulture.

(v) Sewage Treatment Plant (STP) is installed at Thermal power plants to treat sewage/waste water of residential area/township. The treated water, thus produced, is used for horticulture inside the plant boundary.

(vi) Dust extraction and dust suppression systems are provided at Coal handling plant to contain fugitive emission of coal dust.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3787
ANSWERED ON 08.12.2016

HYDEL PROJECTS IN SAARC COUNTRIES

†3787. SHRI BHARAT SINGH:
SHRI MANSHANKAR NINAMA:
DR. RAMESH POKHRIYAL "NISHANK":

Will the Minister of POWER
be pleased to state:

(a) the details of hydel power projects being executed by India in SAARC countries;

(b) the percentage of electricity out of the total production that is likely to be made available to our country from the said projects;

(c) the details of Indian companies which are partners in the said projects; and

(d) the total cost and installed capacity of each of the said projects and the time by which the said projects are likely to start power generation, country-wise?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) to (d) : Three Hydro Electric Projects (HEPs) namely, Punatsangchhu-I, Punatsangchhu-II and Mangdechhu, are under construction with Government of India (GoI)-assistance in Bhutan. As per the bilateral Agreements, the Royal Government of Bhutan agrees that surplus power from these projects shall be sold to India.

These HEPs are being implemented by their respective Project Authorities, set up in pursuance to Inter-Government Agreement between the Govt. of India and the Royal Govt. of Bhutan. The installed capacity, total cost and the time by which the said projects are likely to start power generation are as under:

Sl. No.	Name of Project	Installed Capacity (MW)	Total cost (in crores)	Agreed date of completion
1	Punatsangchhu Stage-I	1200	9375.60 (Dec 2013 PL)	2019-20
2	Punatsangchhu Stage-II	1020	7290.62 (Dec 2015 PL)	2018-19
3	Mangdechhu	720	4020.63 (Mar 2014 PL)	2018-19

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3794
ANSWERED ON 08.12.2016

TECHNOLOGY FOR USE OF DOMESTIC COAL IN POWER PLANTS

†3794. DR. RAVINDRA KUMAR RAY:
PROF. CHINTAMANI MALVIYA:

Will the Minister of POWER
be pleased to state:

(a) whether the thermal power plants cannot use domestic coal with their present design and technology;

(b) if so, the details thereof and the reasons therefor;

(c) whether the Government proposes to modify the present design and technology of the power plants so that they can generate power by using domestic coal; and

(d) if so, the details thereof and if not, the reasons therefor?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) : No, Madam. Most of the thermal Power Plants in India are designed to use domestic coal.

(b) to (d) : Do not arise.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3817
ANSWERED ON 08.12.2016

MODERNIZATION OF POWER PLANTS

†3817. DR. VIRENDRA KUMAR:

Will the Minister of POWER
be pleased to state:

(a) whether the rise has been registered in the plant load capacity of many units due to renewal and modernization of power plants in the country during the last three years and the current year;

(b) if so, the plant-wise and State-wise details thereof;

(c) whether any time bound programme has been envisaged for renewal and modernization of old power plants;

(d) if so, the plant-wise and State-wise details thereof; and

(e) the funds allocated and utilized for the purpose during the period, State/UT-wise?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) & (b) : Yes, Madam. There has been a rise in the plant load capacity of many thermal and hydro generating units due to renewal and modernization of power plants in the country during the last three years and the current year. The Plant-wise and State-wise details of such thermal and hydro generating units is given at Annex-I.

(c) to (e) : The Renovation & Modernisation (R&M) works of thermal generating units are carried out by the concerned State and Central power utilities depending on their requirement. The Plant-wise and State-wise details for R&M/Life Extension works during the 12th Plan period is given at Annex-II.

.....2.

The R&M works of thermal generating units 6 & 7 (2x110 MW) of Barauni Thermal Power Station of Bihar State Power Generation Company Limited (BSPGCL) and units 1 & 2 (2x110 MW) of Muzaffarpur thermal power station of Kanti Bijlee Utpadan Nigam Limited (KBUNL) have been taken up under the Special Plan for Bihar Component of Backward Region Grant Fund (BRGF) of erstwhile Planning Commission, Government of India. Against the allocated grant of Rs.1053.00 Crore for R&M of Barauni TPS units 6&7 and Muzaffarpur TPS units 1&2, the funds utilized were Rs.935.00 Crores as on 30.11.2016.

During 12th Plan period, a total of 23 hydro R&M schemes (2 in Central Sector and 21 in State Sector) having an installed capacity of about 4077 MW and which will accrue benefit of about 567 MW through uprating, life extension and restoration are expected to be completed at an estimated cost of about Rs. 1373 Crores. The state-wise list of 23 hydro R&M schemes expected for completion during the 12th Plan period including fund details is given at Annex-III.

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ANNEX-I

ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 3817 ANSWERED IN THE LOK SABHA ON 08.12.2016.

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Plant-wise and State-wise details of TPSs where rise has been registered in the Capacity due to R&M works in the country during last three years and the current year.

(As on 30.09.2016)

Sl. No.	Thermal Power Plant / Unit No.	Utility / State	Initial Capacity (MW)	Achieved Plant Load Capacity (MW)	Year of Completion
1	Bhatinda TPS / Unit - 4	PSPCL / Punjab	110	120	2013-14
2	Harduaganj TPS / Unit - 7	UPRVUNL / U. P.	110	120	2015-16
3	Bandel TPS / Unit-5	WBPDCL / West Bengal	210	215	2015-16

State-wise List of Hydro RMU&LE schemes completed in last three years and current year in the 12th Plan period

(As on 30.09.2016)

S. No	Project, Agency	Installed Capacity (MW)	Benefits (MW)	Category	Year of Completion
1.	Bassi, HPSEB	124.25	6.0(U)+ 60 (LE)	RMU&LE	2013-14
2.	Sabarigiri, KSEB Unit-4	1x55	5(U)	RM&U	2014-15
3.	Poringalkuthu, KSEB	4x8	4 (U) +32.00 (LE)	RMU&LE	2015-16
4.	Periyar, TANGEDCO	4x35	140 (LE) + 28.00(U)	RMU&LE	2015-16
	Total	287	275 [43(U)+ 232 (LE)]		

Abbreviations: R&M – Renovation & Modernisation;. U – Uprating; LE – Life Extension; Res – Restoration;

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ANNEX-II

ANNEX REFERRED TO IN REPLY TO PARTS (c) TO (e) OF UNSTARRED QUESTION NO. 3817 ANSWERED IN THE LOK SABHA ON 08.12.2016.

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Details of potential thermal generating units identified for Life Extension (LE) / Renovation & Modernisation (R&M) works to be taken up during the 12th Plan

STATE SECTOR

State Sector (LE Programme)

S.N.	State	Name of Station	Unit No.	Year of Comm.	Capacity (MW)
1	U.P.	Obra	10	1977	200
2		Obra	11	1977	200
3		Obra	12	1981	200
4		Obra	13	1982	200
5		Harduaganj	7	1978	110
6		Parichha	1	1984	110
7		Parichha	2	1985	110
8	Punjab	Bathinda	3	1978	110
9		Bathinda	4	1979	110
10	Haryana	Panipat	3	1985	110
11		Panipat	4	1985	110
12	Maharashtra	Nashik	3	1979	210
13		Nashik	4	1980	210
14		Koradi	5	1978	200
15		Koradi	6	1982	210
16		Bhusawal	2	1979	210
17		Bhusawal	3	1982	210
18		Chandrapur	1	1983	210
19		Chandrapur	2	1984	210
20		Parli	3	1980	210
21	Chhattisgarh	Korba (West)	1	1983	210
22		Korba (West)	2	1984	210
23	M.P.	Satpura	6	1979	200
24		Satpura	7	1979	210
25	Tamil Nadu	Tuticorin	1	1979	210
26		Tuticorin	2	1980	210
27	A.P.	Dr. N.T. TPS (Vijaywada)	1	1979	210
28		Dr. N.T. TPS (Vijaywada)	2	1980	210
29	Karnataka	Raichur	1	1985	210
30		Raichur	2	1986	210
31	Bihar	Barauni	6	1983	110
32		Barauni	7	1985	110
33		Muzaffarpur	1	1985	110
34		Muzaffarpur	2	1986	110
35	W.Bengal	Kolaghat	1	1990	210
36		Kolaghat	2	1985	210
37		Kolaghat	3	1984	210
38		Bandel	5	1982	210
Sub Total State Sector (LE)			38		6820

State Sector (R&M Programme)

S.N.	State	Name of Station	Unit No.	Year of Comm.	Capacity (MW)
1	U.P.	Obra	7	1974	100
2		Anpara	1	1986	210
3		Anpara	2	1986	210
4		Anpara	3	1988	210
5		Anpara'B	4	1993	500
6		Anpara'B	5	1994	500
7	Punjab	Ropar	1	1984	210
8		Ropar	2	1985	210
9		Ropar	5	1992	210
10		Ropar	6	2001	210
11	Haryana	Panipat	5	1993	210
12	Gujarat	Wanakbori	1	1982	210
13		Wanakbori	2	1983	210
14		Ukai	3	1979	200
15		Ukai	4	1979	200
16	Rajasthan	Kota	1	1983	110
17		Kota	2	1983	110
18	Jharkhand	Patratu	9	1984	110
19		Patratu	10	1986	110
20	W. Bengal	DPL	6	1985	110
Sub Total State Sector (R&M)			20		4150
Total State sector (LE+R&M)			58		10970

CENTRAL SECTOR

Central Sector LE Programme (Coal Based)

S.N.	Utility	Name of Station	Unit No.	Year of Comm.	Capacity (MW)
1	DVC	Bokaro 'B'	1	1986	210
2		Bokaro 'B'	2	1990	210
3		Bokaro 'B'	3	1993	210
4		Durgapur	4	1982	210
5	NTPC	Badarpur	4	1978	210
6		Badarpur	5	1981	210
7		Singrauli STPS	1	1986	200
8		Singrauli STPS	2	1987	200
9		Singrauli STPS	3	1983	200
10		Singrauli STPS	4	1983	200
11		Singrauli STPS	5	1984	200
12		Korba STPS	1	1983	200
13		Korba STPS	2	1983	200
14		Korba STPS	3	1984	200
15		Ramagundam STPS	1	1984	200
16		Ramagundam STPS	2	1984	200
17		Ramagundam STPS	3	1984	200
Sub total C. S (LE Coal Based)			17		3460

Central Sector LE Programme (Gas Based)

S.N.	State	Name of Station	Unit No.	Year of Comm.	Capacity (MW)
1	NTPC	Dadri GT	GT-1	1991	131
2		Dadri GT	GT-2	1991	131
3		Dadri GT	GT-3	1991	131
4		Dadri GT	GT-4	1991	131
5		Auraiya GT	GT-1	1989	111.19
6		Auraiya GT	GT-2	1989	111.19
7		Auraiya GT	GT-3	1989	111.19
8		Auraiya GT	GT-4	1989	111.19
9		Kawas GT	GT-1A	1992	106
10		Kawas GT	GT-1B	1992	106
11		Kawas GT	GT-2A	1992	106
12		Kawas GT	GT-2B	1992	106
13		Gandhar GT	GT-1	1994	131
14		Gandhar GT	GT-2	1994	131
15		Gandhar GT	GT-3	1994	131
Sub Total C.S. (LE Gas Based)			15		1785.8

Central Sector R&M Programme (Coal Based)

Sl. No.	Utility	Name of Station	Unit No.	Year of Comm.	Capacity (MW)
1	NTPC	Singrauli STPS	6	1986	500
2		Singrauli STPS	7	1987	500
3		Korba STPS	4	1987	500
4		Korba STPS	5	1988	500
5		Korba STPS	6	1988	500
6		Ramagundam STPS	4	1988	500
7		Ramagundam STPS	5	1989	500
8		Ramagundam STPS	6	1989	500
9		Farakka Stage-II	4	1992	500
10		Farakka Stage-II	5	1994	500
11		Tanda	2	1989	110
12		Unchahar	1	1988	210
13		Unchahar	2	1989	210
14		Unchahar	3	1999	210
15		Unchahar	4	1999	210
16		Vindhyachal	1	1987	210
17		Vindhyachal	2	1988	210
18		Vindhyachal	3	1989	210
19		Vindhyachal	4	1989	210
20		Vindhyachal	5	1990	210
21		Vindhyachal	6	1991	210
22		Vindhyachal	7	1999	500
23		Vindhyachal	8	2000	500
24		Simhadri	1	2002	500
25		Simhadri	2	2002	500
26		Talchar STPS	1	1995	500
27		Talchar STPS	2	1996	500
28		Dadri	1	1991	210
29		Dadri	2	1992	210
30		Dadri	3	1993	210
31		Dadri	4	1994	210
32		Rihand STPS Ph III	1	1988	500
33		Rihand STPS Ph III	2	1989	500
34		Kahalgaon	1	1992	210
35		Kahalgaon	2	1994	210
36		Kahalgaon	3	1995	210
37		Kahalgaon	4	1996	210
Sub total C.S. (R&M Coal Based)			37		12890
Sub total C.S. Coal Based (LE + R&M)			54		16350

Central Sector R&M Programme (Gas Based)

1	NEEPCO	Kathalguri CCGT	GT-1	1995	33.50
2		Kathalguri CCGT	GT-2	1995	33.50
3		Kathalguri CCGT	GT-3	1995	33.50
4		Kathalguri CCGT	GT-4	1995	33.50
5		Kathalguri CCGT	GT-5	1996	33.50
6		Kathalguri CCGT	GT-6	1996	33.50
7		Kathalguri CCGT	ST-1	1998	30.00
8		Kathalguri CCGT	ST-2	1998	30.00
Sub Total C.S. (R&M Gas Based)			8		261
Sub Total C.S. Gas Based (LE + R& M)			23		2046.8
Grand Total R&M + LE (State + Central Sector)			135		29367

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ANNEX-III

ANNEX REFERRED TO IN REPLY TO PARTS (c) TO (e) OF UNSTARRED QUESTION NO. 3817 ANSWERED IN THE LOK SABHA ON 08.12.2016.

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State-wise List of Hydro RMU&LE schemes programmed for completion in the 12th Plan period

(As on 30.09.2016)

S. No	Project, Agency	CS/ SS	Inst. Cap. (MW)	Est. Cost (Prov.)	Actual Exp.	Benefits (MW)	Category	Year of Comple-tion
				(Rs. in Crs.)				
Completed Schemes								
Odisha								
1	Rengali Unit-1 OHPC	SS	1x50	47.50	36.76 (as on 30.06.12)	50(LE)	RM&LE	2012-13
2	Rengali Unit-2 OHPC	SS	1x50	25.2 (approx)	20.73	50(LE)	RM&LE	2013-14
Himachal Pradesh								
3	Bassi, HPSEB	SS	4x15	124.25	158.26 (upto 31.08.16)	6.0(U)+ 60 (LE)	RMU&LE	2013-14
Andhra Pradesh								
4	Lower Sileru, APGENCO	SS	4x115	8.75	6.77	-	R&M	2013-14
5	Srisailam RB, APGENCO	SS	7x110	16.70	16.62	-	R&M	2015-16
Telangana								
6	Nagarjuna Sagar Ph-I works, TSGENCO	SS	1x110+ 7x100.8	33.35	13.90 (as on 31.03.2012)	-	R&M	2012-13
Kerala								
7	Idamalayar, KSEB	SS	2x37.5	14.50	13.22 (as on 31.03.13)	-	R&M	2012-13
8	Sabarigiri, KSEB Unit-4	SS	1x55	52.2	50.41 (as on 30.06.2016)	5(U)	RM&U	2014-15
9	Poringalkuthu, KSEB	SS	4x8	88.63	51.63 (as on 30.06.2016)	4 (U) +32.00 (LE)	RMU&LE	2015-16
Assam								
10	Khandong, NEEPCO	CS	1x25	25.05	29.18 (as on 30.09.14)	25.00 (LE)	RM&LE	2014-15
11	Kopili, NEEPCO	CS	2x50	50.22	50.92 (as on 30.09.14)	-	R&M & Refurbishment of Units 1 & 2	2014-15
Karnataka								
12	Supa, KPCL	SS	2x50	3.45	3.88 (as on 30.09.14)	-	R&M	2014-15
13	Sharavathy (Ph B), KPCL	SS	10x103.5	20	29.27	-	R&M	2016-17
Uttarakhand								
14	Pathri, UJVNL	SS	3x6.8	113.25	109.04	20.40(LE)	RM&LE	2014-15
15	Khatima, UJVNL	SS	3x13.8	256.77	116.97	41.40 (LE)	RM&LE	2016-17
Jammu & Kashmir								
16	Lower Jhelum, J&KSPDC	SS	3x35	101.30	96.10 (as on 31.03.16)	15.00 (Res.)	R&M+ Res.	2014-15
17	Sumbal Sindh, J&KSPDC	SS	2x11.3	25.00	24.60	-	R&M	2016-17

Uttar Pradesh								
18	Matatila, UPJVNL	SS	3x10.2	10.29	7.21 (as on 30.06.15)	30.6 (LE)	RM&LE	2015-16
Tamil Nadu								
19	Periyar, TANGEDCO	SS	4x35	161.18	133.68	140 (LE) + 28.00(U)	RMU&LE	2015-16
West Bengal								
20	Jaldhaka St.I, WBSEDCL	SS	3x9	88.62	79.97	27 (LE)	RM&LE	2016-17
	Sub Total(A)		4014.60	1266.21	1049.39	534 [43(U)+ 476 (LE)+ 15 (Res)]		
Ongoing Schemes – Under Implementation								
Jammu & Kashmir								
21	Ganderbal, J&KSPDC	SS	2x3+2x4.5	39.30	10.37	9.00 (LE)	RM&LE	2016-17
22	Chenani, J&KSPDC	SS	5x4.66	39.14	14.66	23.30 (LE)	RM&LE	2016-17
Karnataka								
23	Bhadra River Bed units, KPCL	SS	2x12	28.015	24.21(as on 31.03.16)	-	R&M	2016-17
	Sub Total(B)		62.30	106.46	49.24	32.30 [32.30 (LE)]		
	Total (A+B)		4076.90	1372.67	1098.63	566.70 [43(U) + 508.70 (LE) + 15(Res.)]		

Abbreviations: R&M – Renovation & Modernisation;. U – Uprating; LE – Life Extension; Res – Restoration; MW – Mega Watt; CS-Central Sector: SS- State Sector

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3820
ANSWERED ON 08.12.2016

UNDER CONSTRUCTION POWER PROJECTS

3820. SHRI SANJAY DHOTRE:
SHRI RAJU SHETTY:
SHRI BHARTRUHARI MAHTAB:
DR. SATYAPAL SINGH:
SHRIMATI SANTOSH AHLAWAT:

Will the Minister of POWER
be pleased to state:

(a) the details of power projects under construction in the country and their present status along with the proposed generation capacity, State/UT-wise and source-wise;

(b) whether cost of some of the said projects has escalated due to missing their deadline of completion;

(c) if so, the details of such projects, their deadline of completion and cost escalated separately, and the reasons therefor along with the responsibility fixed in such delays, project-wise;

(d) whether the Government has fulfilled its promise of rehabilitation and employment to the displaced persons of the said projects;

(e) if so, the details thereof, and if not, the reasons therefor, as on date, project-wise;

(f) whether the cases of irregularities/ corruption in execution of the said projects have come to the notice of the Government since inception; and

(g) if so, the details thereof and the reasons therefor, project-wise along with the corrective measures taken/being taken by the Government to prevent irregularities/ corruption therein?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) : The details of under construction power projects in the country along with its proposed generation capacity source-wise and sector-wise are given at Annex-I.

.....2.

(b) & (c) : Some of the under construction power projects are having time/cost overrun. The details of such under construction projects having time/cost overrun are given at Annex-II. Major reasons for time overrun in thermal and hydro projects are given as under:

Thermal

- Slow civil works, delay in Balance of Plants equipment/systems,
- Contractual issues,
- Law & order problem,
- Other customer/ project developer(s) issues,
- Delay in handing over the units to BHEL,
- Delay in finalization and subsequent changes in the scope for R&M (Renovation & Modernisation),
- Changes in layout plan,
- Non-availability of spares,

Hydro

- Delay in Land Acquisition
- Environment and Forest issues
- Rehabilitation & Resettlement issues
- Natural Calamities
- Law & order problem & Local issues
- Contractual problems
- Geological uncertainties
- Difficult Terrain & Poor Accessibility
- Funds constraints
- Force Majeure Risk
- Inter-state issues

The major reasons for cost overrun are; increase in interest rate, general price index and changes in the scope of project.

(d) & (e) : As per Rehabilitation and Resettlement (R&R) Policies of the Government of India and concerned State Government, a comprehensive project specific R&R plan, comprising of measures related to rehabilitation, resettlement and need based community development activities, in line with extant R&R policies is formulated in a consultative and participatory manner involving the stakeholders comprising of representatives from project affected families, District Administration and PSUs. The R&R plan is approved by the concerned State Government and implemented thereafter.

(f) & (g) : Only complaints against Board Level Officers of PSUs are maintained, which inter alia include financial and administrative irregularities. No centralized project wise complaint data is maintained. However, in order to streamline the vigilance machinery, the Ministry of Power has embarked on a host of preventive/proactive measures which include identification and rotation of officers from sensitive posts after three years, implementation of E-governance measures like E-tendering, E-reverse auction and standardization of technical specification for major items of procurement etc.

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ANNEX REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 3820 ANSWERED IN THE LOK SABHA ON 08.12.2016.

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Details of Under Construction Power Projects in the country

Sl. No.	State	Project Name	Unit Number	Capacity (MW)	Original Commissioning Schedule	Anticipated Commissioning Schedule	Fuel
CENTRAL SECTOR							
1	Arunachal Pradesh	Subansiri Lower	8x250	2000	2011	2020-21	Hydro
2	Arunachal Pradesh	Kameng	4x150	600	2009-10	2017-18	Hydro
3	Arunachal Pradesh	Pare	2x55	110	2013-14	2017-18	Hydro
4	*Assam*	Bongaigaon TPP	U-2	250	May-11	Mar-17	Thermal
			U-3	250	Sep-11	Jun-17	Thermal
5	*Bihar*	Barh STPP-I	U-1	660	May-17	May-17	Thermal
			U-2	660	Nov-17	Nov-17	Thermal
			U-3	660	May-18	May-18	Thermal
6	*Bihar*	Muzaffarpur TPP (Kanti) Exp	U-4	195	Jan-13	Dec-16	Thermal
7	*Bihar*	Nabi Nagar TPP	U-2	250	May-13	Mar-17	Thermal
			U-3	250	Aug-13	Jul-17	Thermal
			U-4	250	Nov-13	Oct-17	Thermal
8	*Bihar*	New Nabi Nagar TPP	U-1	660	Jan-17	Jun-17	Thermal
			U-2	660	Jul-17	Dec-17	Thermal
			U-3	660	Jan-18	Jun-18	Thermal
9	*Chhattisgarh*	Lara TPP	U-1	800	Dec-16	Mar-17	Thermal
			U-2	800	Jun-17	Sep-17	Thermal
10	*Himachal Pradesh*	Parbati-II	4x200	800	2009-10	2018-19	Hydro
11	*Jammu & Kashmir*	Kishanganga	3x110	330	2015-16	2017-18	Hydro
12	*Jharkhand*	North Karanpura TPP/	U-1	660	Feb-18	Feb-19	Thermal
			U-2	660	Aug-18	Aug-19	Thermal
			U-3	660	Feb-19	Feb-20	Thermal
13	*Karnataka*	Kudgi STPP Ph-I	U-1	800	Jan-16	Dec-16	Thermal
			U-2	800	Jul-16	Mar-17	Thermal
			U-3	800	Jan-17	Aug-17	Thermal
14	*Maharashtra*	Mouda STPP Ph-II/	U-4	660	Sep-16	Feb-17	Thermal
15	*Maharashtra*	Solapur STPP	U-1	660	May-16	Mar-17	Thermal
			U-2	660	Nov-16	Aug-17	Thermal
16	*Madhya Pradesh*	Gadarwara TPP	U-1	800	Mar-17	Jun-17	Thermal
			U-2	800	Sep-17	Dec-17	Thermal
17	*Madhya Pradesh*	Khargone TPP	U-1	660	Mar-19	Mar-19	Thermal
			U-2	660	Sep-19	Sep-19	Thermal
18	*Mizoram*	Tuirial	2x30	60	2006-17	2017-18	Hydro
19	*Odisha*	Darlipalli STPP	U-1	800	Feb-18	Feb-18	Thermal
			U-2	800	Jun-18	Jun-18	Thermal
20	Telangana	Telangana Ph- I	U-1	800	Jan-20	Jan-20	Thermal
			U-2	800	Jul-20	Jul-20	Thermal
21	*Tamil Nadu*	Neyveli New TPP	U-1	500	Jun-15	Nov-17	Thermal
			U-2	500	Dec-15	May-18	Thermal
22	*Uttarakhand*	Tehri PSS	4x250	1000	2010-11	2019-20	Hydro
23	*Uttarakhand*	Lata Tapovan	3x57	171	2017-18	2021-22	Hydro
24	*Uttarakhand*	Vishnugad Pipakoti	4x111	444	2013-14	2019-20	Hydro
25	*Uttarakhand*	Tapovan Vishnugad	4x130	520	2012-13	2019-20	Hydro
26	*Uttar Pradesh*	Unchahar - IV	U-6	500	Dec-16	Mar-17	Thermal
27	*Uttar Pradesh*	Meja STPP	U-1	660	Jun-16	Apr-17	Thermal
			U-2	660	Dec-16	Oct-17	Thermal
28	*Uttar Pradesh*	Ghatampur TPP	U-1	660	Feb-21	Feb-21	Thermal
			U-2	660	Aug-21	Aug-21	Thermal
29	*Uttar Pradesh*	Tanda TPP	U-1	660	Sep-18	Sep-18	Thermal
			U-2	660	Mar-19	Mar-19	Thermal
30	*West Bengal*	Ramam-III	3x40	120	2019-20	2019-20	Hydro
STATE SECTOR							
31	*Andhra Pradesh*	Dr.Narla Tata Rao TPS St-V	U-1	800	Jun-19	Jun-19	Thermal
32	*Andhra Pradesh*	Sri Damodaran SanjeevaiahTPP St-II	U-1	800	Mar-19	Mar-19	Thermal
33	*Andhra Pradesh*	Rayalaseema TPP St-IV	U-6	600	Jul-14	Apr-17	Thermal
34	*Andhra Pradesh*	Nagarajuna Sagar TR	2x25	50	2008-09	2016-17	Hydro
35	*Andhra Pradesh*	Polavaram	12x80	960	2017-18	2021-22	Hydro

36	*Assam*	Namrup CCGT	GT	62.25	Sep-11	Dec-16	Thermal
			ST	36.15	Jan-12	Sep-17	Thermal
37	*Bihar*	Barauni TPS Extn.	U-8	250	May-14	Jul-17	Thermal
			U-9	250	Jul-14	Dec-17	Thermal
38	*Gujarat*	Bhavnagar CFBC TPP	U-2	250	Dec-13	Nov-16	Thermal
39	*Gujarat*	Wanakbori TPS Extn.	U-8	800	Oct-18	Oct-18	Thermal
40	*Himachal Pradesh*	Uhl-III	3x33.3	100	2006-07	2017-18	Hydro
41	*Himachal Pradesh*	Kashang-II & III	1x65 + 1x65	130	2013-14	2019-20	Hydro
42	*Himachal Pradesh*	Sainj	2x50	100	2014-15	2016-17	Hydro
43	*Himachal Pradesh*	Swara Kuddu	3x37	111	2010-11	2018-19	Hydro
44	*Himachal Pradesh*	Shongtong Karcham	3x150	450	2017-18	2019-20	Hydro
45	*Karnataka*	Yermarus TPP	U-2	800	Oct-14	Jan-17	Thermal
46	*Karnataka*	Yelahanka CCPP	U-1	370	Mar-17	Mar-18	Thermal
47	*Kerala*	Pallivasal	2x30	60	2010-11	2019-20	Hydro
48	*Kerala*	Thottiyar	1x30 + 1x10	40	2012-13	2019-20	Hydro
49	*Maharashtra*	Koradi TPS Expn	U-10	660	Jan-16	Nov-16	Thermal
50	*Maharashtra*	Koyna Left Bank PSS	2x40	80	2017-18	2019-20	Hydro
51	*MP*	Shri Singhaji TPP St-II	U-3	660	Jul-18	Jul-18	Thermal
			U-4	660	Nov-18	Nov-18	Thermal
52	*Meghalaya*	New Umtru	2x20	40	2011-12	2016-17	Hydro
53	*Odisha*	Ib valley TPP	U-3	660	Aug-17	Oct-17	Thermal
			U-4	660	Jan-18	Jun-18	Thermal
54	*Punjab*	Shahpurkandi	3x33 +3x33+1x8	206	2017-18	2019-20	Hydro
55	*Rajasthan*	Chhabra TPP Extn.	U-5	660	Jun-16	Dec-16	Thermal
			U-6	660	Jun-18	Dec-18	Thermal
56	*Rajasthan*	Suratgarh SCTPP	U-7	660	Sep-16	Feb-17	Thermal
			U-8	660	Dec-16	Apr-17	Thermal
57	*Sikkim*	Teesta-III	6x200	1200	2011-12	2016-17	Hydro
58	*Telangana*	Kothagudem TPS St-VII	U-1	800	Nov-17	Jul-18	Thermal
59	*Telangana*	Bhadradri TPP	U-1	270	Feb-17	Dec-17	Thermal
			U-2	270	Apr-17	Feb-18	Thermal
			U-3	270	Jun-17	May-18	Thermal
			U-4	270	Aug-17	Aug-18	Thermal
60	*Telangana*	Pulichintala	4x30	120	2009-11	2016-18	Hydro
61	*Tamil Nadu*	Ennore exp. SCTPP (Lanco)	U-1	660	Jan-18	Sep-18	Thermal
62	*Tamil Nadu*	Ennore SCTPP	U-1	660	Jan-18	Sep-18	Thermal
			U-2	660	Mar-18	Mar-19	Thermal
63	*Tamil Nadu*	North Chennai TPP St-III	U-1	800	Jul-19	Jul-19	Thermal
64	*Tamil Nadu*	Uppur Super Critical TPP	U-1	800	NA	NA	Thermal
			U-2	800	NA	NA	Thermal
65	*Uttar Pradesh*	Harduaganj TPS Exp-II	U-1	660	Jun-19	Jun-19	Thermal
66	*Uttarakhand*	Vyasi	2x60	120	2014-15	2018-19	Hydro
67	*West Bengal*	Sagardighi TPP St-II	U-4	500	Oct-14	Dec-16	Thermal
PRIVATE SECTOR							
68	Arunachal Pradesh	*Gongri*	2x72	144	2017-18	2019-20	Hydro
69	*Andhra Pradesh*	Bhavanapadu TPP Ph-I	U-1	660	Oct-13	Dec-17*	Thermal
			U-2	660	Mar-14	May-18*	Thermal
70	*Andhra Pradesh*	SGPL TPP	U-2	660	Jun-15	Jan-17	Thermal
71	*Andhra Pradesh*	Thamminapatnam TPP stage -II	U-3	350	May-12	Aug-17	Thermal
			U-4	350	Aug-12	Feb-18	Thermal
72	Bihar	Jas Infra. TPP	U-1	660	Aug-14	-	Thermal
			U-2	660	Dec-14	-	Thermal
			U-3	660	Apr-15	-	Thermal
			U-4	660	Aug-15	-	Thermal
73	*Chhattisgarh*	Akaltara TPP (Naiyara)	U-3	600	Dec-12	Mar-16	Thermal
			U-4	600	Apr-13	Jun-17	Thermal
			U-5	600	Aug-13	Mar-16	Thermal
			U-6	600	Dec-13	Jun-18	Thermal
74	*Chhattisgarh*	Binjkote TPP	U-1	300	Aug-13	Nov-16	Thermal
			U-2	300	Nov-13	Jan-17	Thermal
			U-3	300	Feb-14	-	Thermal
			U-4	300	May-14	-	Thermal
75	*Chhattisgarh*	Lanco Amarkantak TPP-II	U-3	660	Jan-13	Jan-17	Thermal
			U-4	660	Mar-13	May-17	Thermal
76	*Chhattisgarh*	Singhitarai TPP	U-1	600	Jun-14	Mar-17	Thermal
			U-2	600	Sep-14	Sep-17	Thermal

77	*Chhattisgarh*	Nawapara TPP	U-2	300	Apr-14	Dec-16	Thermal
78	*Chhattisgarh*	Uchpinda TPP	U-3	360	Feb-13	Dec-16	Thermal
			U-4	360	Jul-13	May-17	Thermal
79	*Chhattisgarh*	Salora TPP	U-2	135	Sep-11	-	Thermal
80	*Chhattisgarh*	Deveri (Visa) TPP	U-1	600	Aug-13	-	Thermal
81	*Himachal Pradesh*	Sorang	2x50	100	2012-13	2017-18	Hydro
82	*Himachal Pradesh*	Tidong-I	2x50	100	2013-14	2017-18	Hydro
83	*Himachal Pradesh*	Tangnu Romai-I	2x22	44	2014-15	2018-19	Hydro
84	*Himachal Pradesh*	Bajoli Holi	3x60	180	2017-18	2019-20	Hydro
85	*Himachal Pradesh*	Chanju-I	3x12	36	2014-15	2016-17	Hydro
86	*Jammu & Kashmir*	Ratle	4x205 1x30	850	2017-18	2021-22	Hydro
87	*Jharkhand*	Matrishri Usha TPP Ph-I	U-1	270	May-12	2017-18	Thermal
			U-2	270	Jun-12	2018-19	Thermal
88	*Jharkhand*	Matrishri Usha TPP Ph-II	U-3	270	Feb-13	-	Thermal
			U-4	270	Mar-13	-	Thermal
89	*Jharkhand*	Tori TPP Ph-I	U-1	600	Jul-12	-	Thermal
			U-2	600	Sep-12	-	Thermal
90	*Jharkhand*	Tori TPP Ph-II	U-3	600	Dec-15	-	Thermal
91	*Maharashtra*	Amravati TPP Ph-II	U-1	270	Jul-14	2020-21	Thermal
			U-2	270	Sep-14	2021-22	Thermal
			U-3	270	Nov-14	2021-22	Thermal
			U-4	270	Jan-15	2021-22	Thermal
92	*Maharashtra*	Lanco Vidarbha TPP	U-1	660	Jan-14	Jun-17	Thermal
			U-2	660	May-14	Sep-17	Thermal
93	*Maharashtra*	Nasik TPP Ph-I	U-2	270	Apr-12	Dec-16	Thermal
			U-3	270	Jun-12	Dec-16	Thermal
			U-4	270	Aug-12	Feb-17	Thermal
			U-5	270	Oct-12	Apr-17	Thermal
94	*Maharashtra*	Nasik TPP Ph-II	U-1	270	Apr-13	-	Thermal
			U-2	270	Jun-13	-	Thermal
			U-3	270	Aug-13	-	Thermal
			U-4	270	Oct-13	-	Thermal
			U-5	270	Dec-13	-	Thermal
95	*Maharashtra*	Bijora Ghanmukh TPP	U-1	300	Dec-16	2018-19	Thermal
			U-2	300	Mar-17	2018-19	Thermal
96	*Maharashtra*	Shirpur Power	U-1	150	Feb-15	Feb-17	Thermal
			U-2	150	Apr-15	Apr-17	Thermal
97	*Madhya Pradesh*	Mahan TPP	U-2	600	Jun-15	Nov-16	Thermal
98	*Madhya Pradesh*	Gorgi TPP	U-1	660	Jun-13	-	Thermal
99	*Madhya Pradesh*	Niwari TPP	U-2	45	Apr-14	2017-18	Thermal
100	*Madhya Pradesh*	Maheshwar	10x40	400	2001-02	2017-19	Hydro
101	*Odisha*	Ind Barath TPP (Odisha)	U-2	350	Dec-11	Mar-17	Thermal
102	*Odisha*	KVK Nilanchal TPP	U-1	350	Dec-11	-	Thermal
			U-2	350	Jan-12	-	Thermal
			U-3	350	Mar-12	-	Thermal
103	*Odisha*	Lanco Babandh TPP	U-1	660	Apr-13	Feb-18	Thermal
			U-2	660	Aug-13	Aug-18	Thermal
104	*Odisha*	Malibrahmani TPP	U-1	525	Dec-12	2017-18	Thermal
			U-2	525	Feb-13	2018-19	Thermal
105	*Sikkim*	Teesta-VI	4x125	500	2012-13	2021-22	Hydro
106	*Sikkim*	Rangit-IV	3x40	120	2011-12	2018-19	Hydro
107	*Sikkim*	Bhasmey	2x25.5	51	2012-13	2019-20	Hydro
108	*Sikkim*	Tashiding	2x48.5	97	2015-16	2016-17	Hydro
109	*Sikkim*	Dikchu	2x48	96	2017-18	2016-17	Hydro
110	*Sikkim*	Rangit-II	2x33	66	2017-18	2019-20	Hydro
111	*Sikkim*	Rongnichu	2x48	96	2015-16	2019-20	Hydro
112	*Sikkim*	Panan	4x75	300	2018-19	2020-21	Hydro
113	*Tamil Nadu*	Tuticorin TPP (Ind-Barath)	U-1	660	May-12	2018-19	Thermal
114	*Tamil Nadu*	Tuticorin TPP St-IV	U-1	525	Sep-18	Sep-18	Thermal
115	*Uttarakhand*	Phata Byung	2x38	76	2013-14	2019-20	Hydro
116	*Uttarakhand*	Singoli Bhatwari	3x33	99	2012-13	2020-21	Hydro
117	*Uttar Pradesh*	Prayagraj (Bara) TPP	U-3	660	Dec-14	Dec-16	Thermal
118	*WB*	India Power TPP	U-1	150	Nov-15	Jan-17	Thermal
			U-2	150	Feb-16	Oct-17	Thermal
			U-3	150	May-16	Feb-18	Thermal

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ANNEX REFERRED TO IN REPLY TO PARTS (b) & (c) OF UNSTARRED QUESTION NO. 3820 ANSWERED IN THE LOK SABHA ON 08.12.2016.

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Under Construction Power Projects having cost and time overrun									
Sl. No	State	Project Name	Unit No	Capacity (MW)	Fuel	Original Commission-ing Schedule	Anticipated Commission-ing Schedule	Original Cost (Rs. in Crores)	Latest Cost (Rs. in Crores)
CENTRAL SECTOR									
1	Arunachal Pradesh	Pare	2x55	110	Hydro	2012-13	2017-18	573.99	1339.57
2	Arunachal Pradesh	Kameng	4x150	600	Hydro	2009-10	2017-18	2496.9	6179.96
3	Arunachal Pradesh/Assam	Subhansiri	8x250	2000	Hydro	2006-11	2020-21	6285.33	17435.15
4	*Assam*	Bongaigaon TPP	U-2	250	Thermal	May-11	Apr-17	4375.35	6749.18
			U-3	250	Thermal	Sep-11	Jul-17		
								Cost for 3 units	
5	*Bihar*	Barh STPP- I	U-1	660	Thermal	Oct-13	May-17	8693	15095.67
			U-2	660	Thermal	Apr-14	Nov-17		
			U-3	660	Thermal	Oct-14	May-18		
6	*Bihar*	Muzaffarpur TPS Exp	U-4	195	Thermal	Jan-13	Dec-16	3154.33	3942.16
								Cost of 2 units	
7	*Bihar*	Nabi Nagar TPP	U-2	250	Thermal	Sep-13	May-17	5352.51	7998
			U-3	250	Thermal	Jan-14	Jul-17		
			U-4	250	Thermal	May-14	Oct-17		
								For 4 units	
8	*Bihar*	New Nabi Nagar TPP	U-1	660	Thermal	Jan-17	Jun-17	13624.02	15131.67
			U-2	660	Thermal	Jul-17	Dec-17		
			U-3	660	Thermal	Jan-18	Jun-18		
9	*Himachal Pradesh*	Parbati - II	4x200	800	Hydro	2009-10	2018-19	3919.59	8398.75
10	*Jammu & Kashmir*	Kishanganga	3x110	330	Hydro	2014-15	2017-18	2238.67	5783.17
11	*Maharashtra*	Solapur STPP	U-1	660	Thermal	May-16	Apr-17	9395.18	9395.18
			U-2	660	Thermal	Nov-16	Aug-17		
12	*Mizoram*	Tuirial	2x30	60	Hydro	2006-17	2017-18	368.72	1441.52
13	*Tamil Nadu*	Neyveli New TPP/ NLC	U-1	500	Thermal	Jun-15	Feb-18	*5907.11*	5907.11
			U-2	500	Thermal	Dec-15	May-18		
14	*Uttar Pradesh*	Unchahar St- IV	U-6	500	Thermal	Dec-16	Nov-17	3363.12	3363.12
15	*Uttar Pradesh*	Meja STPP	U-1	660	Thermal	Jun-16	Apr-17	10821	10821
			U-2	660	Thermal	Dec-16	Oct-17		
			U-4	660	Thermal	Jan-18	Uncertain		
16	*Uttarakhand*	Vishnugad Pipalkoti	4x111	444	Hydro	2013-14	2019-20	2491.58	-
17	*Uttarakhand*	Lata Tapovan	3x57	171	Hydro	2017-18	2021-22	1527	-
18	*Uttarakhand*	Tapovan Vishnughad	4x130	520	Hydro	2012-13	2019-20	2978.48	3846.3
19	*Uttarakhand*	Tehri	4x250	1000	Hydro	2010-11	2019-20	1657.6	2978.86
STATE SECTOR									
20	*Andhra Pradesh*	Rayalseema TPP St-III	U-6	600	Thermal	Aug-14	Apr-17	3028.86	3781.86
21	*Andhra Pradesh*	Nagarjuna Sagar Tail Pool	2x25	50	Hydro	2008-09	2016-17	464.63	958.67
22	*Andhra Pradesh*	Polavaram	12x80	960	Hydro	2017-18	2021-22	16010.45	-
23	*Assam*	Namrup CCGT	GT	70	Thermal	Sep-11	Jul-16	411	694
			ST	30	Thermal	Jan-12	Mar-17		
24	*Bihar*	Barauni TPS Extn.	U-8	250	Thermal	May-14	Feb-17	3666.06	5308
			U-9	250	Thermal	Jul-14	Apr-17		
25	*Gujarat*	Bhavnagar CFBC TPP	U-2	250	Thermal	May-13	Sep-16	3742.08	4223.11
								For 2 units	
26	*Himachal Pradesh*	Kashang - II & III	1x65+ 1x65	65 65	Hydro	2013-14 2013-14	Comm 2019-20	601.78	-
27	*Himachal Pradesh*	Uhl-III	3x33.33	100	Hydro	2006-07	2017-18	431.56	940.84
28	*Himachal Pradesh*	Sawra Kuddu	3x37	111	Hydro	2010-11	2018-18	558.53	1181.9
29	*Himachal Pradesh*	Sainj	2x50	100	Hydro	2014-15	2016-17	784.56	-
30	*Himachal Pradesh*	Shongtom Karcham	3x150	450	Hydro	2017-18	2019-20	2807.83	3316.35
31	*Karnataka*	Yermarus TPP	U-2	800	Thermal	Oct-14	Aug-16	9015	12770

32	*Kerala*	Pallivasal	2x30	60	Hydro	2010-11	2019-20	222	284.69
33	*Kerala*	Thottiyar	1x30+ 1x10	40	Hydro	2012-13	2019-20	136.79	150.02
34	*Maharashtra*	Koradi TPP Expn.	U-10	660	Thermal	Jan-16	Aug-16	11880	13232.1
								Cost 3 units	
35	*Maharashtra*	Koyna Left Bank PSS	2x40	80	Hydro	2017-18	2019-20	245.02	1494.94
36	*Meghalaya*	New Umtru	2x20	40	Hydro	2011-12	2016-18	226.4	599
37	*Punjab*	Shahpurkandi	3x33 + 3x33 + 1x8	206	Hydro	2017-18	2019-20	2285.81	-
38	Rajasthan	Chhabra STPP	U-5	660	Thermal	Sep-16	Feb-17	7920	7950.33
			U-6	660	Thermal	Jun-18	Dec-18		
39	Sikkim	Teesta State-III	6x200	1200	Hydro	2011-12	2016-17	5705.55	13965
40	*Telangana*	Bhadradri TPP	U-1	270	Thermal	Feb-17	Nov-17	5044	5044
			U-2	270	Thermal	Apr-17	Jan-18		
			U-3	270	Thermal	Jun-17	Mar-18		
			U-4	270	Thermal	Aug-17	May-18		
41	*Telangana*	Pulichintala	4x30	120	Hydro	2009-11	2016-18	380	563.49
42	*Tamil Nadu*	Ennore SCTPP TANGEDCO	U-1	660	Thermal	Jan-18	Sep-18	9800.4	9800.4
			U-2	660	Thermal	Mar-18	Mar-19		
43	*Uttarakhand*	Vyasi	2x60	120	Hydro	2014-15	2018-19	936.23	-
44	*West Bengal*	Sagardighi TPP-II	U-4	500	Thermal	Oct-14	Sep-16	5340.35	5340.35
								cost for 2 units	
PRIVATE SECTOR									
45	Ar. Pradesh	Gongri	2x72	144	Hydro	2017-18	2019-20	1436.27	-
46	*Andhra Pradesh*	Bhavanapadu TPP Ph-I	U-1	660	Thermal	Oct-13	Dec-17	6571.94	9343.15
			U-2	660	Thermal	Mar-14	May-18		
47	*Andhra Pradesh*	SGPL TPP (NCC TPP)	U-1	660	Thermal	Mar-15	Nov-16	7046	7046
			U-2	660	Thermal	Jun-15	Dec-16		
48	*Andhra Pradesh*	Thamminap-atnam TPP stage - II	U-3	350	Thermal	May-12	Aug-16	3120	5005
			U-4	350	Thermal	Aug-12	Feb-18		
49	Bihar	Jas Infra. TPS	U-1	660	Thermal	Aug-14	2019-20	11120	11120
			U-2	660	Thermal	Dec-14	2020-21		
			U-3	660	Thermal	Apr-15	Uncertain		
			U-4	660	Thermal	Aug-15	Uncertain		
50	*Chhattisgarh*	Akaltara TPP (Naiyara)	U-3	600	Thermal	Dec-12	Apr-17	16190	22874.48
			U-4	600	Thermal	Apr-13	Aug-17		
			U-5	600	Thermal	Aug-13	Dec-17		
			U-6	600	Thermal	Dec-13	Apr-18		
								Cost 6 units	
51	*Chhattisgarh*	Binjkote TPP	U-1	300	Thermal	Aug-13	Nov-16	5058	7940
			U-2	300	Thermal	Nov-13	Apr-17		
			U-3	300	Thermal	Feb-14	-		
			U-4	300	Thermal	May-14	-		
52	*Chhattisgarh*	Lanco Amarkantak TPP-II	U-3	660	Thermal	Jan-13	Sep-17	6886	10815.24
			U-4	660	Thermal	Mar-13	Dec-17		
53	*Chhattisgarh*	Singhitarai TPP	U-1	600	Thermal	Jun-14	Dec-16	4650	8443.79
			U-2	600	Thermal	Sep-14	Jun-17		
54	*Chhattisgarh*	Nawapara TPP (TRN Energy)	U-1	300	Thermal	Dec-13	Aug-16	2844	3725.97
			U-2	300	Thermal	Apr-14	Dec-16		
55	*Chhattisgarh*	Uchpinda TPP	U-3	360	Thermal	Feb-13	Sep-16	6653	11784.51
			U-4	360	Thermal	Jul-13	Dec-16		
								Cost for 4 units	
56	*Chhattisgarh*	Salora TPP	U-2	135	Thermal	Sep-11	-	1458.44	1458.44
57	*Chhattisgarh*	Deveri TPP (Visa TPP)	U-1	600	Thermal	Aug-13	-	2618.7	3930
58	*Himachal Pradesh*	Bajoli Holi	3x60	180	Hydro	2017-18	2019-20	1696.93	-
59	*Himachal Pradesh*	Chanju-I	3x12	36	Hydro	2014-15	2016-17	295.09	-

60	*Himachal Pradesh*	Sorang	2x50	100	Hydro	2012-13	2017-18	586	-
61	*Himachal Pradesh*	Tidong-I	2x50	100	Hydro	2013-14	2017-18	543.15	-
62	*Himachal Pradesh*	Tangnu Romai-I	2x22	44	Hydro	2014-15	2018-19	255	-
63	*Jammu & Kashmir*	Ratle	4x205 + 1x30	850	Hydro	2017-18	2021-22	5517.02	6257
64	*Jharkhand*	Matrishri Usha TPP Ph-I	U-1	270	Thermal	May-12	2017-18	2900	2900
			U-2	270	Thermal	Jun-12	2018-19		
65	*Jharkhand*	Matrishri Usha TPP Ph-II	U-3	270	Thermal	Feb-13	-	3182	3182
			U-4	270	Thermal	Mar-13	-		
66	*Jharkhand*	Tori TPP-Ph-I	U-1	600	Thermal	Jun-13	-	5700	5700
			U-2	600	Thermal	Jan-15	-		
67	*Jharkhand*	Tori TPP-Ph-II	U-3	600	Thermal	-	-	2500	2500
68	*Maharashtra*	Amravati TPP Ph-II	U-1	270	Thermal	Jul-14	2020-21	6646	6646
			U-2	270	Thermal	Sep-14	2021-22		
			U-3	270	Thermal	Nov-14	2021-22		
			U-4	270	Thermal	Jan-15	2021-22		
			U-5	270	Thermal	Mar-15	2021-22		
69	*Maharashtra*	Lanco Vidarbha TPP	U-1	660	Thermal	Jan-14	Jun-17	6936	10433
			U-2	660	Thermal	May-14	Sep-17		
70	*Maharashtra*	Nasik TPP Ph-I	U-2	270	Thermal	Apr-12	Sep-16	6789	7848.98
			U-3	270	Thermal	Jun-12	Dec-16		
			U-4	270	Thermal	Aug-12	Feb-17		
			U-5	270	Thermal	Oct-12	Apr-17		
								Cost for 5 units	
71	*Maharashtra*	Nasik TPP Ph-II	U-1	270	Thermal	Apr-13	-	6789	6789
			U-2	270	Thermal	Jun-13	-		
			U-3	270	Thermal	Aug-13	-		
			U-4	270	Thermal	Oct-13	-		
			U-5	270	Thermal	Dec-13	-		
72	*Maharashtra*	Bijora Ghanmukh TPP	U-1	300	Thermal	Dec-16	2018-19	3189	3450
			U-2	300	Thermal	Mar-17	2018-19		
73	*Madhya Pradesh*	Mahan TPP	U-2	600	Thermal	Sep-11	Aug-16	4860	7738
									Cost 2 units
74	*Madhya Pradesh*	Gorgi TPP	U-1	660	Thermal	Jun-13	-	3941	3941
75	*Madhya Pradesh*	Niwari TPP	U-2	45	Thermal	May-14	2017-18	232.49	250.49
76	*Madhya Pradesh*	Maheshwar	10x40	400	Hydro	2001-02	2017-19	1569.27	6793
77	*Orissa*	Ind Bharat TPP (Orissa)	U-2	350	Thermal	Dec-11	Dec-16	3185	4001
								For 2 units	
78	*Orissa*	KVK Nilanchal TPP	U-1	350	Thermal	Dec-11	-	4990	6000
			U-2	350	Thermal	Jan-12	-		
			U-3	350	Thermal	Mar-12	-		
79	*Orissa*	Lanco Babandh TPP	U-1	660	Thermal	Apr-13	Nov-17	6930	10430
			U-2	660	Thermal	Aug-13	Feb-18		
80	*Orissa*	Malibrahmani TPP	U-1	525	Thermal	Dec-12	2017-18	5093	6330
			U-2	525	Thermal	Feb-13	2018-19		
81	*Sikkim*	Bhasmey	2x25.5	51	Hydro	2012-13	2019-20	408.5	690.3
82	*Sikkim*	Panan	4x75	300	Hydro	2018-19	2020-21	1833.05	2021.9
83	*Sikkim*	Rangit-II	2x33	66	Hydro	2017-18	2019-20	496.44	-
84	*Sikkim*	Rangit-IV	3x40	120	Hydro	2011-12	2019-20	726.17	1692.6
85	*Sikkim*	Rongnichu	2x48	96	Hydro	2015-16	2019-20	491.32	1187
86	*Sikkim*	Teesta State-VI	4x125	500	Hydro	2012-13	2021-22	3283.08	5400
87	*Sikkim*	Tashiding	2x48.5	97	Hydro	2015-16	2016-17	465.95	-
88	*TN*	Tuticorin TPP (Ind- Barath)	U-1	660	Thermal	May-12	2018-19	3595	3595
89	*UP*	Prayagraj (Bara) TPP	U-2	660	Thermal	Jul-14	Sep-16	11622.27	13870
			U-3	660	Thermal	Dec-14	Oct-16		
90	*Uttarakhand*	Phata Byung	2x38	76	Hydro	2013-14	2019-20	520	1225.53
91	*Uttarakhand*	Singoli Bhatwari	3x33	99	Hydro	2012-13	2020-21	666.47	1577
92	*WB*	India Power TPP	U-1	150	Thermal	May-16	Oct-16	2656	3307
			U-2	150	Thermal	Sep-16	May-17		
			U-3	150	Thermal	Jan-17	Aug-17		

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3824
ANSWERED ON 08.12.2016

POWER GENERATION

3824. SHRI MALLIKARJUN KHARGE:

Will the Minister of POWER
be pleased to state:

(a) the total capacity of power plants which are already existing or are under construction;

(b) the total capacity of the power plants that the Government proposes to approve;

(c) whether the Government is aware of a study done by Greenpeace International according to which 94% of the coal power capacity that is currently under construction will be lying idle in 2022 and the capital cost of this would be around Rs.3,23,925 crore; and

(d) if so, the details thereof and the steps proposed to be taken thereon?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) : The total installed capacity of existing power plants as on 30.11.2016 is 309 GW out of which 1,87,803 MW are coal based power plants, 25,282 MW are gas based power plants, 919 MW are diesel power plants, 5,780 MW are nuclear power plants, 43,112 MW are hydro power plants and 45,917 MW from Renewable Energy sources (RES).

As on 30.11.2016, out of an aggregate capacity of 86,910.4 MW, 74 Thermal Power Projects with a capacity of 73,728.4 MW and 44 Hydro Electric Projects (above 25 MW) with a capacity of 13,182 MW are under construction in the country.

.....2.

(b) : As per Section 7 of the Electricity Act 2003, any generating company may establish, operate and maintain a generating station without obtaining a license/permission under this Act, if it complies with the technical standards relating to connectivity with the grid. Accordingly, sanction of the Government is not required for setting up of thermal power projects. However, for setting up of Hydroelectric Power Projects, the Detailed Project Reports (DPRs) are required to be submitted for concurrence of the Central Electricity Authority (CEA).

DPRs of 41 Hydro Electric Projects with an aggregate installed capacity of 22,925 MW have been concurred by the CEA. The DPRs of 10 Hydro Electric Projects with an aggregate installed capacity of 6,559 MW are with various appraising group of Central Electricity Authority (CEA)/Central Water Commission (CWC)/Central Soil and Materials Research Station (CSMRS)/Ministry of Water Resources, River Development & Ganga Rejuvenation (MoWR, RD & GR).

(c) & (d) : Various organisations including external funding agencies carry out studies on their own and draw their own inferences which are not binding on the Government. The Report of Greenpeace International has not been examined in the Ministry of Power. However, as per the assessment made by the CEA, around 60% of the over all electricity requirement by the year 2022 would be met by coal based thermal generation.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3825
ANSWERED ON 08.12.2016

ROADMAP FOR PROVIDING ROUND THE CLOCK ELECTRICITY

†3825. SHRI PASHUPATI NATH SINGH:

Will the Minister of POWER
be pleased to state:

(a) whether the Union Government has prepared a roadmap for providing round the clock electricity in 10 States;

(b) if so, the details thereof including names of the States chosen for the purpose;

(c) whether the Government is facing any difficulties in this regard; and

(d) if so, the details thereof ?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) to (d): Government of India has taken a joint initiative with the respective State Governments for preparation of State Specific Documents which give a roadmap for providing “24x7 Power for All” (PFA). 34 out of the 36 States / UTs, have jointly signed the “24x7 Power for All” documents as per details given at Annex. The concurrence for signing the same for the remaining 2 States viz Tamil Nadu and Uttar Pradesh is still awaited.

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ANNEX

ANNEX REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 3825 ANSWERED IN THE LOK SABHA ON 08.12.2016.

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List of States / UTs who have given concurrence and their State Specific document for providing 24x7 Power for All have been signed.

Sl. No.	State
1	Andaman & Nicobar Islands
2	Andhra Pradesh
3	Arunachal Pradesh
4	Assam
5	Bihar
6	Chandigarh
7	Chhattisgarh
8	Dadra & Nagar Haveli
9	Daman & Diu
10	Delhi
11	Goa
12	Gujarat
13	Haryana
14	Himachal Pradesh
15	Jammu & Kashmir
16	Jharkhand
17	Karnataka
18	Kerala
19	Lakshadweep
20	Madhya Pradesh
21	Maharashtra
22	Manipur
23	Meghalaya
24	Mizoram
25	Nagaland
26	Odisha
27	Puducherry
28	Punjab
29	Rajasthan
30	Sikkim
31	Telangana
32	Tripura
33	Uttarakhand
34	West Bengal

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3826
ANSWERED ON 08.12.2016

SHORTAGE OF POWER

†3826. SHRI RAJU SHETTY:
SHRIMATI KAMLA DEVI PAATLE:

Will the Minister of POWER
be pleased to state:

(a) whether the shortage of electricity is affecting agricultural and industrial production in the country;

(b) if so, the details thereof; and

(c) the corrective steps proposed or taken by the Union Government in this regard?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) & (b): Electricity is a concurrent subject. The supply and distribution of electricity to various consumers including agricultural and industrial consumers in a State / UT is within the purview of the respective State Government / State Power Utility. The Central Government supplements the efforts of the State Governments by establishing power plants in the Central Sector only through Central Power Sector Undertakings (CPSUs) for the purpose of power generation and allocating power there from to them. At present, the installed power generation capacity in the country is 3,07,278 MW which is sufficient to meet the demand of electricity.

As reported by the States to the Central Electricity Authority (CEA), the Energy shortage at all India level has reduced to 2.1% during the year 2015-16 from 4.2% during 2013-14 which was the lowest in the last two decades. During the current year 2016-17 (Upto October, 2016), Energy shortage has further reduced to 0.7%.

.....2.

(c) : The following steps have been taken to bridge the gap between the demand and supply of electricity in the country:

(i) During the 12th Plan period (2012-17), a capacity addition of about 88928.2 MW as against the target of 88537 MW from conventional sources have been achieved till 31st October, 2016 and about 21,128 MW as against the target of 30000 MW from renewable sources have been achieved till 30th September, 2016.

(ii) Adequate supply of the domestic coal to power plants has been ensured. The growth of domestic coal supply to power plants has been around 6.2% during 2015-16.

(iii) During the 12th Plan period (2012-17), 1,00,468 ckm as against the target of 1,07,440 ckm of transmission lines and 2,88,458 MVA as against the target of 2,82,750 MVA of transformation capacity have been completed till 31st October, 2016.

(iv) The Government of India has taken an initiative to prepare State specific Action Plans for providing 24X7 Power For All (PFA) in partnership with the States.

(v) Two new schemes have been launched by the Government of India, namely, Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Integrated Power Development Scheme (IPDS) for strengthening of sub-transmission and distribution networks and for segregation of agricultural feeders to give adequate and reliable supply and reduce line losses.

(vi) The Government of India has taken several steps to promote energy conservation, energy efficiency and other demand side management measures.

(vii) The Central Government has notified Ujjwal Discom Assurance Yojana (UDAY) scheme, on 20.11.2015, for Operational & Financial Turnaround of DISCOMs.

(viii) The Government of India has taken steps for expeditious resolution of issues relating to Environmental and forest clearances for facilitating early completion of generation and transmission projects.

(ix) The Government of India has launched a scheme by providing support from Power System Development Fund (PSDF) for operationalisation of stranded gas based generation.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3842
ANSWERED ON 08.12.2016

ALLOCATION OF POWER TO STATES

3842. SHRI PARVESH SAHIB SINGH:

Will the Minister of POWER
be pleased to state:

(a) whether States have demanded allocation of more power from Central generating stations and to augment transmission capacities;

(b) if so, the details thereof;

(c) the details of the present power allocation to the various States and what percentage of their respective total capacities the said allocation constitutes;

(d) whether the Government has made any plan for the increased allocation of power from the central pool to the States; and

(e) if so, the details thereof and if not, the reasons therefor?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) & (b) : No request has been received from any state during this year either for allocation of more power from the Central Sector Generating Stations or to augment transmission capacities.

(c) : The details of the present power allocation (firm) to the various states and the percentage of their respective total capacities in the said allocation that constitutes is given at Annex.

(d) & (e) : No, Madam. The entire capacity of a Central Generating plant stands fully allocated to the states/beneficiaries at any instant of time. As such, there is no scope for any increased allocation to the States from the existing power plants except in cases where states have surrended their share.

In the event of surrender of allocation by any States, the same is allocated by Ministry of Power (MOP) among the States, who requisition for this power as per the relevent Central Electricity Regulatory Commission (CERC) regulations. As on date, around 4500 MW from various Central Generating Stations has been surrendered by various states and the request of states had been sent to all the states for availing this power and the letter has also been posted on the website of MOP with a request that the willing states may give their consent to avail such power. As on date, there is no request pending with MOP for reallocation to willing state.

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ANNEX

ANNEX REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 3842 ANSWERED IN THE LOK SABHA ON 08.12.2016.

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Sl. No.	Region / State	Installed Capacity in State *	Total MW share from Central Sector Generating Stations	Total MW share from CGS as % of Installed Capacity in State
(1)	(2)	(3)	(4)	(5) = (4/3)*100
1	Chandigarh	126	119	94.6
2	Delhi	8042	5514	68.6
3	Haryana	8511	2457	28.9
4	Himachal Pradesh	4608	1537	33.4
5	Jammu & Kashmir	3142	1580	50.3
6	Punjab	12987	2054	15.8
7	Rajasthan	18083	2550	14.1
8	Uttar Pradesh	19959	5456	27.3
9	Uttarakhand	3494	861	24.7
10	Chhattisgarh	16404	1622	9.9
11	Gujarat	30325	3872	12.8
12	Madhya Pradesh	18937	4540	24.0
13	Maharashtra	39984	7026	17.6
14	Daman & Diu	59	55	93.2
15	Dadra and Nagar Haveli	90	90	100.0
16	Goa	412	364	88.4
17	Andhra Pradesh	16247	1600	9.9
18	Karnataka	17684	2104	11.9
19	Kerala	4104	1627	39.6
20	Tamil Nadu	26601	5142	19.3
21	Telangana	11731	1871	15.9
22	Puducherry	335	302	90.3
23	Bihar	3075	2661	86.5
24	Jharkhand	2626	386	14.7
25	Odisha	9422	1788	19.0
26	West Bengal	10077	1354	13.4
27	Sikkim	414	167	40.4
28	Arunachal Pradesh	262	157	59.9
29	Assam	1387	892	64.3
30	Manipur	210	168	80.2
31	Meghalaya	515	202	39.2
32	Mizoram	127	85	67.2
33	Nagaland	144	113	78.6
34	Tripura	611	420	68.8

*This includes allocated shares in joint & Central Sector Utilities

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3856
ANSWERED ON 08.12.2016

DEVELOPMENT SCHEMES FOR POWER SECTOR

3856. SHRI R.P. MARUTHARAJAA:

Will the Minister of POWER
be pleased to state:

(a) the details of development schemes/ programmes launched in power sector in various States including Tamil Nadu, State/ UT-wise;

(b) the total amount sanctioned, released and utilized under those schemes during the last three years and the current year, State/UT-wise;

(c) the number of households without any electricity facility, category-wise e.g. rural and urban SC/ST and others for each State; and

(d) the total number of villages connected with electricity facility during the last two years including the current year, State/UT-wise?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) & (b) : The details of development schemes/programmes launched in power sector in various States including Tamil Nadu are as under:

(i) Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) : It provides (a) Electrification of all un-electrified villages/habitations irrespective of populations; (b) Separation of agriculture and non-agriculture feeders, facilitating judicious rostering of supply to agricultural & non-agricultural consumers in the rural areas; (c) Strengthening and augmentations of sub-transmission & distribution infrastructure in rural areas, including metering at distribution transformers/ feeders/consumers. An amount of Rs. 66167.28 crore has been sanctioned during the last three years and the current year under DDUGJY and 13017.05 crore has been released. The State-wise details are given at Annex-I.

.....2.

(ii) Integrated Power Development Scheme (IPDS): The IPDS is to provide quality and reliable power supply in the urban areas. The main components of IPDS are: (a) strengthening of sub-transmission and distribution network in the urban areas; (b) Metering of distribution transformers/feeders/consumers in the urban areas; (c) IT enablement of distribution sector and strengthening of distribution network being undertaken under the erstwhile Restructured Accelerated Power Development and Reforms Programme (R-APDRP), which is now subsumed under IPDS. Under IPDS, projects worth Rs. 25,880 crore have been sanctioned for 30 states including Tamil Nadu.

The details regarding sanctions and disbursements made under R-APDRP and IPDS during the last three years and the current year are given at Annex-II.

(iii) The Ministry of Power has been working with the States by implementing schemes relating to energy efficiency and energy conservation, namely, Strengthening of State Designated Agencies (SDAs); Contribution of Bureau of Energy Efficiency (BEE) towards State Energy Conservation Fund; Municipal Demand Side Management; Agriculture Demand Side Management; and Energy Conservation Building Codes. The details of funds released to various states under these schemes are given at Annex – III.

(iv) The Government of India launched Ujwal DISCOM Assurance Yojana (UDAY) for the financial and operational turnaround of state-owned Power Distribution Companies (DISCOMs). The scheme aims to reduce the interest burden, reduce the cost of power, reduce power losses in Distribution sector, and improve operational efficiency of DISCOMs. There are no financial implications on the part of Government of India under UDAY.

Tamil Nadu is participating under the scheme UDAY.

(v) The LED Programme has two components, namely, (i) Unnat Jyoti by Affordable LEDs for All (UJALA) to provide LED bulbs to domestic consumers; and Street Lighting National Programme (SLNP) for replacement of conventional street lights with smart and energy efficient LED street lights. The LED Programme is being implemented by Energy Efficiency Services Limited (EESL), a joint venture company of four power sector PSUs viz. NTPC, PFC, REC & PGCIL, without any budgetary allocation from the Government of India.

(c) & (d) : As per census 2011, there were 16.78 crore households in the Country and 7.50 crore households were un-electrified. Under DDUGJY, free electricity connections to 2.5 crore BPL households have been released, as on 31.10.2016. APL households are required to obtain electricity connections from the concerned State DISCOM/Power Department by paying applicable connection charges as per their norms. The State-wise number of un-connected rural households as per census 2011 and the number of villages electrified under DDUGJY (including RE component of DDUGJY) during the last two years and the current year, are given at Annex-IV.

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ANNEX-I

ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 3856 ANSWERED IN THE LOK SABHA ON 08.12.2016.

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Details of amount sanctioned and released under DDUGJY during the last three years and the current year

(Rs in crore)

Sl No.	Name of the State	Amount sanctioned and released during the last three years and the current year i.e. 2013-14 to 2016-17 (as on 31.10.2016)	
		Sanctioned Project Cost	Funds released/ utilized
1	Andhra Pradesh	993.34	131.32
2	Andaman & Nicobar	20.96	119.66
3	Arunachal Pradesh	418.93	9.14
4	Assam	3161.88	573.59
5	Bihar	11077.01	3544.63
6	Chhattisgarh	1837.76	497.26
7	Dadra & Nagar Haveli	5.00	0.00
8	Goa	20.00	0.00
9	Gujarat	924.72	77.69
10	Haryana	1577.31	0.00
11	Himachal Pradesh	159.12	28.35
12	Jammu & Kashmir	720.96	35.09
13	Jharkhand	3906.15	322.38
14	Karnataka	1897.62	138.36
15	Kerala	490.68	112.77
16	Madhya Pradesh	4374.07	1005.01
17	Maharashtra	2163.44	66.20
18	Manipur	259.70	124.50
19	Meghalaya	304.47	18.13
20	Mizoram	107.46	60.47
21	Nagaland	134.69	62.65
22	Odisha	5303.97	951.98
23	Puducherry	20.15	0.00
24	Punjab	252.06	0.00
25	Rajasthan	4292.23	384.03
26	Sikkim	20.10	16.29
27	Tamil Nadu	924.12	88.40
28	Telangana	462.30	15.69
29	Tripura	390.35	107.71
30	Uttar Pradesh	14229.73	3888.13
31	Uttarakhand	845.30	73.97
32	West Bengal	4871.71	563.65

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ANNEX-II

ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 3856 ANSWERED IN THE LOK SABHA ON 08.12.2016.

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Details of amount sanctioned and released under R-APDRP/IPDS during the last three years and the current year

(Rs in crore)

Sl. No.	Name of State/ UT	Name of Scheme /Programme	Amount sanctioned and released during the last three years and the current year i.e. 2013-14 to 2016-17	
			Funds Sanctioned	Funds Released/utilized
1	Haryana	R-APDRP	794	91
		IPDS	391	24
2	Himachal Pradesh	R-APDRP	NIL	97
		IPDS	111	9
3	Jammu & Kashmir	R-APDRP	NIL	35
		IPDS	447	NIL
4	Punjab	R-APDRP	123	48
		IPDS	326	20
5	Rajasthan	R-APDRP	110	56
		IPDS	1310	79
6	Uttar Pradesh	R-APDRP	1946	753
		IPDS	4722	327
7	Uttarakhand	R-APDRP	6	108
		IPDS	192	16
8	Delhi	R-APDRP		
		IPDS	198	NIL
9	Madhya Pradesh	R-APDRP	NIL	87
		IPDS	1509	91
10	Gujarat	R-APDRP	170	86
		IPDS	1127	68
11	Chhattisgarh	R-APDRP	NIL	70
		IPDS	492	30
12	Maharashtra	R-APDRP	NIL	NIL
		IPDS	2417	139
13	Goa	R-APDRP	NIL	NIL
		IPDS	NIL	NIL
14	Andhra Pradesh	R-APDRP	158	77
		IPDS	654	39
15	Telangana	R-APDRP	27	83
		IPDS	654	39
16	Karnataka	R-APDRP	8	160
		IPDS	1144	69
17	Kerala	R-APDRP	NIL	40
		IPDS	600	36
18	Tamil Nadu	R-APDRP	655	NIL
		IPDS	1569	NIL
19	Puducherry	R-APDRP	NIL	17
		IPDS	22	NIL

20	Bihar	R-APDRP	NIL	97
		IPDS	2111	127
21	Jharkhand	R-APDRP	1252	28
		IPDS	735	NIL
22	West Bengal	R-APDRP	126	22
		IPDS	2940	177
23	Odisha	R-APDRP	423	79
		IPDS	1083	65
24	Assam	R-APDRP	NIL	127
		IPDS	585	50
25	Arunachal Pradesh	R-APDRP	NIL	NIL
		IPDS	151	NIL
26	Nagaland	R-APDRP	NIL	2
		IPDS	44	NIL
27	Manipur	R-APDRP	NIL	139
		IPDS	130	11
28	Meghalaya	R-APDRP	160	48
		IPDS	62	NIL
29	Mizoram	R-APDRP	240	72
		IPDS	49	NIL
30	Sikkim	R-APDRP	NIL	20
		IPDS	NIL	NIL
31	Tripura	R-APDRP	NIL	61
		IPDS	74	6

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ANNEX-III

ANNEX REFERRED TO IN REPLY TO PARTS (a) & (b) OF UNSTARRED QUESTION NO. 3856 ANSWERED IN THE LOK SABHA ON 08.12.2016.

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Total Amount sanctioned released and utilized for States under various Energy Efficiency/Conservation schemes during the last three years including the current year

(Rs. in Lakh)

Sl. No.	State	2013-14		2014-15		2015-16		2016-17	
		Sanctioned	Released	Sanctioned	Released	Sanctioned	Released	Sanctioned	Released
1	Andaman & Nicobar	56.84	56.84	0.00	0.00	23.27	23.27	9.00	
2	Lakshadweep	80.84	80.84	0.00	0.00	3.75	3.75	17.00	
3	Puducherry	45.71	45.71	8.00	8.00	17.75	17.75	35.00	
4	Chandigarh	80.84	80.84	0.00	0.00	0.00	0.00	52.00	
5	Dadra & Nagar Haveli	0.00	0.00	0.00	0.00	0.00	0.0	9.0	
6	Daman & Diu	112.80	112.80	0.00	0.00	0.00	0.0	62.0	
7	Delhi	112.80	112.80	0.00	0.00	0.00	0.00	71.00	
8	Goa	310.84	310.84	8.00	8.00	17.75	17.75	52.00	
9	Sikkim	23.00	23.00	8.00	8.00	18.00	18.00	44.00	
10	Assam	29.00	29.00	32.00	32.00	259.00	259.00	128.00	
11	Arunachal Pradesh	67.41	67.41	26.00	26.00	39.00	39.00	65.00	
12	Nagaland	48.16	48.16	26.00	26.00	64.00	64.00	245.00	200.00
13	Manipur	89.29	89.29	0.00	0.00	0.00	0.00	9.00	
14	Mizoram	42.41	42.41	57.00	57.00	39.00	39.00	260.00	200.00
15	Tripura	46.41	46.41	32.00	32.00	39.00	39.0	70.0	
16	Meghalaya	36.41	36.41	32.00	32.00	59.00	59.00	294.00	
17	Andhra Pradesh	118.00	118.00	0.00	0.00	81.00	81.00	183.00	
18	Bihar	181.14	181.14	0.00	0.00	51.00	51.000	128.000	
19	Chhattisgarh	186.89	186.89	38.00	38.00	41.00	41.00	78.00	
20	Gujarat	444.79	444.79	8.00	8.00	21.00	21.00	71.00	
21	Haryana	158.60	158.60	32.00	32.00	41.00	41.00	127.00	
22	Jharkhand	37.00	37.00	0.00	0.00	21.00	21.000	43.500	
23	Karnataka	37.00	37.00	39.00	39.00	51.00	51.0	89.0	
24	Kerala	67.91	67.91	32.00	32.00	31.00	31.00	79.00	
25	Madhya Pradesh	186.26	186.26	26.00	26.00	61.00	61.000	145.000	
26	Maharashtra	276.26	276.26	38.00	38.00	23.00	23.00	42.00	
27	Odisha	68.66	68.66	8.00	8.00	41.00	41.000	79.000	
28	Punjab	103.91	103.91	69.00	69.00	51.00	51.000	71.800	
29	Rajasthan	103.91	103.91	0.00	0.00	51.00	51.00	101.00	
30	Tamil Nadu	59.66	59.66	0.00	0.00	51.00	51.00	122.00	
31	Uttar Pradesh	361.39	361.39	0.00	0.00	261.00	261.00	142.00	
32	Uttarakhand	53.41	53.41	8.00	8.00	241.00	241.00	77.00	
33	West Bengal	58.66	58.66	8.00	8.00	51.00	51.00	157.00	
34	Himachal Pradesh	133.79	133.79	39.00	39.00	26.00	26.00	80.00	
35	Jammu & Kashmir	293.79	293.79	0.00	0.00	16.00	16.00	59.00	
Total		4113.78	4113.78	574.00	574.00	1790.52	1790.52	3296.30	400.00

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ANNEX-IV

ANNEX REFERRED TO IN REPLY TO PARTS (c) & (d) OF UNSTARRED QUESTION NO. 3856 ANSWERED IN THE LOK SABHA ON 08.12.2016.

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Details of number of households without any electricity facility and number of villages connected with electricity facility during the last two years including the current year

Sl. No.	Name of State	No. of households without any electricity facility as per Census 2011 (in crore).	No. of villages connected with electricity facility during the last two years & the current year i.e. 2014-15 to 2016-17
1	A & N	0.00	00
2	Andhra Pradesh/Telangana	0.15	00
3	Arunachal Pradesh	0.01	452
4	Assam	0.39	1921
5	Bihar	1.52	2353
6	Chandigarh	0.00	00
7	Chhattisgarh	0.13	588
8	Dadra & Nagar Haveli	0.00	00
9	Daman & Diu	0.00	00
10	Goa	0.00	00
11	Gujarat	0.10	00
12	Haryana	0.04	00
13	Himachal Pradesh	0.00	34
14	Jammu & Kashmir	0.03	41
15	Jharkhand	0.32	1440
16	Karnataka	0.10	07
17	Kerala	0.03	00
18	Lakshadweep	0.00	00
19	Madhya Pradesh	0.46	433
20	Maharashtra	0.34	00
21	Manipur	0.01	304
22	Meghalaya	0.02	701
23	Mizoram	0.00	85
24	Nagaland	0.01	32
25	NCT Delhi	0.00	00
26	Odisha	0.52	1701
27	Puducherry	0.00	00
28	Punjab	0.01	00
29	Rajasthan	0.40	416
30	Sikkim	0.00	00
31	Tamil Nadu	0.09	00
32	Tripura	0.02	15
33	Uttar Pradesh	1.94	1495
34	Uttarakhand	0.02	7
35	West Bengal	0.82	8

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3864
ANSWERED ON 08.12.2016

PROJECTS FOR POWER GENERATION

3864. SHRI N.K. PREMACHANDRAN:

Will the Minister of POWER
be pleased to state:

(a) whether the Union Government proposes to extend financial assistance to the State Governments for hydro electric projects, if so, the details thereof, State-wise;

(b) whether the Union Government is implementing programmes in power sector with the aid of foreign agencies, if so the details thereof;

(c) the schemes and programmes introduced by the Union Government for increasing the power generation and the projects approved for the purpose, State-wise including Kerala;

(d) the details of the projects approved by the Union Government for reducing the transmission loss, State-wise; and

(e) whether the Union Government proposes to introduce any scheme for increasing the power generation using new and renewable energy, if so the action taken thereon?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) : The Government of India has been extending financial support / subsidy to the developers of the small hydro projects up to 25 MW installed capacity. Details of the same are given at Annex-I.

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(b) : As far as hydro power sector is concerned, a number of projects like Purulia Pumped Storage (1000 MW), Nathpa Jhakri (1500 MW), Vishnugad Pipalkoti (444 MW) etc. have been developed / are being developed with the financial assistance from International agencies like the World Bank, ADB (Asian Development Bank), JICA (Japan International Cooperation Agency) etc. Further, under the framework of cooperation between the Government of India and the Government of Germany, KfW Germany is providing soft loan to the tune of Euro 1 Billion for the funding of Green Energy Corridors in both intra and inter State transmission projects.

Also an investment approval for “North Eastern Region Power System Improvement Project (NERPSIP) Tranche-I” scheme was given to strengthen the transmission and distribution infrastructure in Sikkim and Six states of North Eastern Region (Assam, Manipur, Mizoram, Meghalaya, Nagaland and Tripura). The estimated cost of the scheme is Rs. 5111.33 crores (Feb, 2014 price level). The scheme is being funded by the Govt. of India through the budget of Ministry of Power and the World Bank on 50:50 basis.

(c) : Presently, 44 hydro projects, with an aggregate capacity of 13182 MW, are under construction in the country as per details given in Annex-II.

(d) : The UDAY (Ujwal DISCOM Assurance Yojana) scheme announced by the Ministry of Power specifies targeted activities such as compulsory feeder and Distribution Transformer (DT) metering by States, Consumer Indexing & GIS Mapping of losses, Upgrade or change transformers, meters alongwith timelines etc. Smart metering of all consumers, consuming above 200 units/ month, Demand Side Management (DSM), Quarterly tariff revision, campaign to check power theft, assured increased power supply in areas where the Aggregate Technical & Commercial (AT&C) losses are reduced etc. are some additional measure to reduce AT&C losses.

The Government of India has set a target for achieving a total Renewable Capacity of 175 GW by the end of 2022 for increasing the power generation in the country. This includes 100 GW from Solar, 60 GW from Wind, 10 GW from Biomass and 5 GW from Small Hydro Power capacity.

In addition, the revised Tariff Policy notified on 28.01.2016 has given thrust to promote generation of electricity from renewable sources by introducing Renewable Power Obligations, Renewable Generation Obligation, bundling of renewable power with power from thermal plants, compulsory procurement of 100% power produced from all the Waste-to-Energy Plants in the State by the Distribution Companies and no inter-State Transmission charges and losses to be levied for renewable power (solar / wind) till such period as notified by the Government of India.

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ANNEX-I

ANNEX REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 3864 ANSWERED IN THE LOK SABHA ON 08.12.2016.

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The Government has been providing financial support/subsidy for the following activities to develop SHP sector:-

- Research and development, capacity building
- Resource Assessment, Detailed Survey and Investigation, DPR Preparation and Perspective Plans for States
- Capital Subsidy to State Sector Project
- Subsidy for Commercial Projects
- Renovation and Modernisation of Old SHP Projects (State sector)
- Water Mills/Micro-hydel projects. The details are given below: -

Subsidy to SHP projects

Following subsidies are given by Ministry of New & Renewable Energy (MNRE) for SHP projects:

(i) Support for Survey, Investigation and Preparation of DPRs for identification of new potential sites
- Rs. 6.00 lakhs for project upto 1.00 MW capacity and
- Rs. 10.00 lakhs for project with more than 1.00 MW & upto 25 MW capacity to the Govt. dept./agencies

(ii) Support to new SHP projects in the Private, Co-operative, Joint sector:

Category	Above 0.1 MW – 25 MW
N. E. Region, J & K, H.P. & Uttarakhand (Special Category States)	Rs. 1.5 Crore/MW limited to Rs.5.00 Crore per project
Other States	Rs. 1.00 Crore/MW limited to Rs.5.00 Crore per project

(iii) Support to new SHP project in the Government/State Sector:

Areas	Up to 100 KW & upto 1000 KW	Above 1 MW & upto 25 MW
N.E. States, J&K, H.P. & Uttarakhand (Special Category States)	Rs. 75,000 per KW	Rs. 7.5crores / MW Limited to Rs.20 crore per project
Other States	Rs. 35,000 per KW	Rs. 3.5 crores / MW limited to rs.20 Crore per project.

(iv) Scheme to support Renovation & Modernization of old SHP projects in Government / State sector :

Category	Up to 1000 KW	Above 1 MW & upto 25 MW
All States & UTs	Rs.10,000 per KW	Rs.1.00crore/MW limited to Rs.10.00 crore per project.

(v) Central Financial Assistance for Watermills and Micro Hydel Projects

A. Watermills:

S No.	Category of Watermill	Amount of CFA
1.	Mechanical output only	Rs.50,000/- per Watermill
2.	a) Electrical output (up to 5 kW) or b) Both mechanical and electrical output (up to 5 kW)	Rs.1,50,000/- per Watermill

B. Micro Hydel Projects up to 100 kW Capacity:

Areas	Amount of CFA
All States	Rs.1,25,000/- per kW

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ANNEX-II

ANNEX REFERRED TO IN REPLY TO PART (c) OF UNSTARRED QUESTION NO. 3864 ANSWERED IN THE LOK SABHA ON 08.12.2016.

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List of under construction Hydro projects (above 25 MW) – Sector wise

As on 31.10.2016

Sl. No.	Name of Project	State/ Implementing Agency	Capacity (MW)
	Central Sector		
1	Kishanganga (3x110= 330 MW)	Jammu & Kashmir/NHPC	330
2	Parbati St. II (4x200= 800 MW)	Himachal Pradesh/NHPC	800
3	Tapovan Vishnugad (4x130=520 MW)	Uttarakhand /NTPC	520
4	Tehri PSS (4x250= 1000 MW)	Uttarakhand/THDC	1000
5	Lata Tapovan (3x57= 171 MW)	Uttarakhand/NTPC	171
6	Vishnugad Pipalkoti (4x111= 444 MW)	Uttarakhand/THDC	444
7	Subansiri Lower (8x250= 2000 MW)	Arunachal Pradesh/NHPC	2000
8	Kameng (4x150= 600 MW)	Arunachal Pradesh/NEEPCO	600
9	Pare (2x55= 110 MW)	Arunachal Pradesh/NEEPCO	110
10	Tuirial (2x30= 60 MW)	Mizoram/NEEPCO	60
11	Rammam III (3x40=120 MW)	West Bengal/NTPC Ltd.	120
		Sub- Total (Central):	6155
	State Sector		
12	Shahpurkandi (3x33+3x33+1x8= 206 MW)	Punjab/Irr. Deptt. & PSPCL	206
13	Uhl-III (3x33.33= 100 MW)	Himachal Pradesh/ Beas Valley Power Corp. Ltd. (BVPC)	100
14	Kashang-II & III (1x65 + 1x65= 130 MW)	Himachal Pradesh/ HPPCL	65
15	Sainj (2X50=100 MW)	Himachal Pradesh/ HPPCL	100
16	Sawra Kuddu (3x37= 111 MW)	Himachal Pradesh/HPPCL	111
17	Shongtong Karcham (3x150= 450 MW)	Himachal Pradesh/HPPCL	450
18	Vyasi (2X60=120 MW)	Uttarakhand/UJVNL	120
19	Koyna Left Bank PSS (2x40= 80 MW)	Maharashtra/WRD, GO Mah.	80
20	Nagarujana Sagar TR (2x25= 50 MW)	Andhra Pradesh/APGENCO	50
21	Polavaram (12x80= 960 MW)	Andhra Pradesh/ Polavaram Project Authority	960
22	Pulichintala (4x30= 120 MW)	Telangana/TSGENCO	90
23	Pallivasal (2x30= 60 MW)	Kerala/KSEB	60
24	Thottiyar (1x30 + 1x10= 40 MW)	Kerala/KSEB	40
25	New Umtru (2x20= 40 MW)	Meghalaya/MePGCL	40
26	Teesta- III (6x200= 1200 MW)	Sikkim/Teesta Urja Ltd.	1200
		Sub- Total (State):	3672
	Private Sector		
27	Ratle (4x205+1x30= 850 MW)	Jammu & Kashmir/Ratle Hydro Electric Project Pvt. Ltd.	850

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28	Sorang (2x50= 100 MW)	Himachal Pradesh/ Himachal Sorang Power	100
29	Tangnu Romai- I (2x22= 44 MW)	Himachal Pradesh/ Tangu Romai Power Generation	44
30	Bajoli Holi (3x60= 180 MW)	Himachal Pradesh/GMR Bajoli Holi Hydro Power Pvt. Ltd.	180
31	Chanju-I (3x12= 36 MW)	Himachal Pradesh/IA Energy	36
32	Tidong-I (2x50= 100 MW)	Himachal Pradesh/M/s NSL Tidong	100
33	Phata Byung (2x38= 76 MW)	Uttarakhand/M/s Lanco	76
34	Singoli Bhatwari (3x33= 99 MW)	Uttarakhand/L&T Uttaranchal Hydro power Limited	99
35	Maheshwar (10x40= 400 MW)	Madhya Pradesh/SMHPCL	400
36	Teesta- VI (4x125= 500 MW)	Sikkim/LANCO	500
37	Rangit-IV (3x40= 120 MW)	Sikkim/ Jal Power corp. Ltd.	120
38	Bhasmey (2x25.5= 51 MW)	Sikkim/ Gati Infrastructure	51
39	Tashiding (2x48.5= 97 MW)	Sikkim/Shiga Energy Pvt. Ltd.	97
40	Dikchu (2x48= 96 MW)	Sikkim/ Sneha Kinetic Power Projects Pvt. Ltd.	96
41	Rangit-II (2x33= 66 MW)	Sikkim/Sikkim Hydro Power Ltd.	66
42	Rongnichu (2x48= 96 MW)	Sikkim/Madhya Bharat Power Corporation Ltd.	96
43	Panan (4x75= 300 MW)	Sikkim/ Himgiri Hydro Energy Pvt. Ltd.	300
44	Gongri (2x72= 144 MW)	Arunachal Pradesh/Diran Energy Pvt. Ltd.	144
		Sub- Total (Private):	3355
		Total (Central + State + Private)	13182

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3870
ANSWERED ON 08.12.2016

SHARE OF POWER SECTOR IN BANKS' NPAs

†3870. SHRI ANANTKUMAR HEGDE:

Will the Minister of POWER
be pleased to state:

(a) whether the power generation sector had 12.39% share in the NPAs of banks during December, 2015 which has increased in June, 2016;

(b) if so, the facts thereof and the percentage of said increase in June, 2016;

(c) whether the Union Government has ascertained the reasons for increase in power sector's share of NPAs; and

(d) if so, the details thereof?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) to (d) : No, Madam. The share of Power Generation Sector in the Gross Non-performing Assets (GNPAs) of Scheduled Commercial Banks (SCBs), as on December 2015, was 4.54%, which has decreased to 4.38% in June, 2016, as indicated below:

(In Rs crore)

Period as on	Gross NPAs	Power generations GNPAs	Share of Power Generation - GNPAs in Gross NPAs (in %)
31-Dec-2015	4,36,883	19,831	4.54
30-Jun-2016	6,15,429	26,967	4.38

The Financial Stability Report (June-2015) released by the Reserve Bank of India (RBI) has highlighted some of the major problems in power sector as under:

- Fuel availability / linkages
- Project clearances
- Social activism
- Aggressive bidding in coal block auctions by power producers resulting in lower plant load factors (PLF).
- Dependence on imported coal which is more expensive.
- Poor financial health of State DISCOMs.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3873
ANSWERED ON 08.12.2016

ENERGY CONSUMPTION

3873. SHRI SHIVKUMAR UDASI:

Will the Minister of POWER
be pleased to state:

(a) the details of the growth rate of energy consumption in the country during the last three years and the current year;

(b) whether the growth in energy consumption is considered to be indicative of economic revival, if so, the details thereof along with its adverse effect of environment; and

(c) the steps being taken by the Union Government to maintain ecological balance?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) : The details of the growth rate of energy consumption (Utilities & Non-Utilities) in the country during the last three years and the current year is given at Annex.

(b) & (c) : Generally, growth in energy consumption is positively correlated with economic growth.

Growth in energy generation from inefficient coal based thermal power stations has some adverse effect on environment. However, in order to reduce adverse effect on environment and to maintain ecological balance, the Government of India is taking following measures:

(i) Government has set a target to achieve a large capacity of 175 GW from renewable energy sources by the year 2022, thereby increasing the share of clean, pollution free energy in the energy-mix of our country. As a result, the fossil based capacity addition will be less in the coming years.

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(ii) Installation of coal fired generation units based on supercritical technology. These units are more efficient than sub-critical units resulting in less fuel consumption & air emissions. A capacity addition of 36,930 MW based on supercritical technology has been achieved and 48,200 MW of supercritical thermal units are under construction. Further, it is proposed that coal based capacity addition during the 13th Plan period shall be mainly through super-critical units.

(iii) Phased retirement of in-efficient and old thermal power generation units has been taken up. A capacity of about 6010 MW has already been retired as on 31.10.2016.

(iv) To facilitate State Utilities/IPPs to replace old inefficient coal based thermal units with supercritical units, Ministry of Coal, Government of India has formulated a policy of automatic transfer of LOA/Coal linkage (granted to old plants) to new (proposed) super-critical units.

(v) Coal cess has been increased from Rs.200/ton to Rs.400/ton to enhance National Clean Energy Fund (NCEF) to be utilized for promoting clean electricity production.

(vi) Perform, Achieve & Trade (PAT) Scheme was introduced in the year 2012 to reduce specific energy consumption of Thermal Units. This scheme has resulted in improving the unit heat rate and thereby reduction in emissions.

(vii) Thermal Power Plants have been asked to undertake afforestation, development of green-belt area, use of Effluent Treatment Plant (ETP) for treating effluents produced by various processes to maintain the quality for recycle/use in horticulture inside the plant and the water intake/discharge temperature difference from cooling tower to sea/ river/lake is maintained less than 7^0 C to avoid adverse effect on fish and other aquatic organisms.

(viii) The new Thermal Power Plants have been mandated to maintain Zero Liquid Discharge (ZLD) to ensure less adverse effect on ecology.

(ix) Sewage Treatment Plant (STP) is installed in Thermal plants to treat sewage/ waste water of residential area/township. The treated water, thus produced, is used for horticulture inside the plant boundary.

(x) Ministry of Environment, Forest & Climate Change (MOEF&CC) has notified new stringent environmental norms on 07 December 2016 for thermal power plants for Suspended Particulate Matter (SPM), SO_2, NOx and mercury emissions and water consumption. The implementation of pollution control equipment for meeting these norms will further reduce the adverse impact on environment due to thermal plants.

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ANNEX

ANNEX REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 3873 ANSWERED IN THE LOK SABHA ON 08.12.2016.

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The details of the growth rate of energy consumption (Utilities & Non-Utilities) in the country during the last three years and the current year

Year	Energy Consumption (Million Unit)	Growth (%)
2011-12	785194.52	-
2012-13	824301.17	4.98
2013-14	874208.58	6.05
2014-15	948521.82	8.50
2015-16	996271.71*	5.03*
Source - General Review	*Provisional	

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3874
ANSWERED ON 08.12.2016

GAS BASED POWER PLANTS

†3874. SHRI SHER SINGH GHUBAYA:
PROF. CHINTAMANI MALVIYA:

Will the Minister of POWER
be pleased to state:

(a) whether the Union Government proposes to restart nine gas based power plants lying closed at present;

(b) if so, the details thereof;

(c) the annual power generation capacity of the gas based power plants in unit terms; and

(d) the per unit rate at which electricity is likely to become available for the consumers from these plants?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) to (d) : Government of India has sanctioned a scheme for importing spot Re-gasified Liquefied Natural Gas (RLNG) in 2015-16 and 2016-17 for the stranded gas based power plants as well as for plants receiving domestic gas upto the target Plant Load Factor (PLF) selected through a reverse e-bidding process. The scheme provides for financial support from PSDF (Power System Development Fund). The details of these plants are given at Annex-I & II respectively. The scheme envisages sacrifices to be made collectively by all stakeholders, including the Central and State Governments by way of exemptions from applicable taxes and levies/duties on the incremental RLNG being imported for the purposes. The Electricity generated under the scheme, the net tariff to the Discom does not exceed the target price of Rs. 4.70 per unit for SGP (Stranded Gas Plant) and Rs. 3.39 for DGP (Domestic gas plants).

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ANNEX-I

ANNEX REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 3874 ANSWERED IN THE LOK SABHA ON 08.12.2016.

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LIST OF STRANDED GAS BASED CAPACITY

S. No	Name of Power Station	Installed Capacity (MW)	Name of the State
CENTRAL SECTOR			
1	RATNAGIRI (RGPPL-DHABHOL)	1967	MAHARASHTRA
	Total (CS)	1967	
STATE SECTOR			
2	PRAGATI CCGT-III	750	DELHI
3	DHUVARAN CCPP(GSECL)	112	GUJARAT
4	UTRAN CCPP(GSECL)	374	GUJARAT
5	PIPAVAV CCPP	702	GUJARAT
6	DHUVARAN CCPP(GSECL)	376.3	GUJARAT
7	HAZIRA CCPP EXT	351	GUJARAT
	Total (SS)	2665.3	
	TOTAL(PUBLIC)	4632.3	
PRIVATE SECTOR			
1	VATWA CCPP (TORRENT)	100	GUJARAT
2	RITHALA CCPP (NDPL)	108	DELHI
3	ESSAR CCPP **	300	GUJARAT
4	UNOSUGEN CCPP	382.5	GUJARAT
5	DGEN Mega CCPP	1200	GUJARAT
6	GAUTAMI CCPP	464	ANDHRA PRADESH
7	GMR - KAKINADA (Tanirvavi)	220	ANDHRA PRADESH
8	JEGURUPADU CCPP (GVK)	220.5	ANDHRA PRADESH
9	KONASEEMA CCPP	445	ANDHRA PRADESH
10	KONDAPALLI EXTN CCPP .	366	ANDHRA PRADESH
11	VEMAGIRI CCPP	370	ANDHRA PRADESH
12	SRIBA INDUSTRIES	30	ANDHRA PRADESH
13	RVK ENERGY	28	ANDHRA PRADESH
14	SILK ROAD SUGAR	35	ANDHRA PRADESH
15	LVS POWER	55	ANDHRA PRADESH
16	GMR Vemagiri Exp	768	ANDHRA PRADESH
17	Kondapalli Exp St-III	742	ANDHRA PRADESH
18	Samalkot Exp	2400	ANDHRA PRADESH
19	CCGT by Panduranga	116	ANDHRA PRADESH
20	Gas Engine by Astha	35	TELANGANA
21	Kashipur Sravanthi St-I&II	450	UTTARAKHAND
22	Beta Infratech CCGT	225	UTTARAKHAND
23	Gama Infraprop CCGT	225	UTTARAKHAND
24	CCGT by Pioneer Gas Power Ltd	388	MAHARASHTRA
	Total (PVT)	9673	
Total		14305.3	

- Note that out of total 515 MW capacity, 300 MW electricity is being supplied to grid & balance 215 MW is used as captive generation.

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ANNEX-II

ANNEX REFERRED TO IN REPLY TO PARTS (a) TO (d) OF UNSTARRED QUESTION NO. 3874 ANSWERED IN THE LOK SABHA ON 08.12.2016.

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LIST OF PLANTS RECEIVING DOMESTIC GAS

Sl. No.	Name of Power Station	Installed Capacity (MW)	Name of the State
1	NTPC,FARIDABAD CCPP	431.59	HARYANA
2	NTPC, ANTA CCPP	419.33	RAJASTHAN
3	NTPC, AURAIYA CCPP	663.36	UTTAR PRADESH
4	NTPC, DADRI CCPP	829.78	UTTAR PRADESH
5	NTPC, GANDHAR (JHANORE)	657.39	GUJARAT
6	NTPC, KAWAS CCPP	656.2	GUJARAT
	TOTAL (CS)	3657.65	
7	I.P.CCPP	270	DELHI
8	PRAGATI CCGT-III	750	DELHI
9	PRAGATI CCPP	330.4	DELHI
10	DHOLPUR CCPP	330	RAJASTHAN
11	DHUVARAN CCPP(GSECL)	106.42	GUJARAT
12	HAZIRA CCPP(GSEG)	156.1	GUJARAT
13	UTRAN CCPP(GSECL)	144	GUJARAT
14	URAN CCPP (MAHAGENCO)	672	MAHARASHTRA
	TOTAL (SS)	2758.92	
	TOTAL(PUBLIC)	6416.57	
1	TROMBAY CCPP (TPC)	180	MAHARASHTRA
2	BARODA CCPP (GIPCL)	160	GUJARAT
3	GODAVARI (SPECTRUM)	208	ANDHRA PRADESH
4	JEGURUPADU CCPP (GVK)	235.4	ANDHRA PRADESH
5	KONDAPALLI CCPP (LANCO)	350	ANDHRA PRADESH
6	PEDDAPURAM (BSES)	220	ANDHRA PRADESH
7	VIJESWARAN CCPP	272	ANDHRA PRADESH
8	PEGUTHAN CCPP (GTEC)	655	GUJARAT
9	SUGEN CCPP (TORRENT)	1147.5	GUJARAT
	TOTAL (PVT)	3427.9	
	GRAND TOTAL	9844.47	

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3890
ANSWERED ON 08.12.2016

UDAY

†3890. SHRIMATI DARSHANA VIKRAM JARDOSH:
SHRI CH. MALLA REDDY:
PROF. CHINTAMANI MALVIYA:

Will the Minister of POWER
be pleased to state:

(a) whether the Government has fixed a target to ensure loss free operation of each power distribution company by the year- 2019;

(b) if so, the details thereof along with the steps being taken/likely to be taken to bail out the loss making power distribution companies;

(c) whether a few States have gone through the Ujwal DISCOM Assurance Yojana (UDAY) process and if so, the names of those States and the results achieved by them;

(d) the steps being taken to reign in other States under the UDAY; and

(e) the percentage of debt financing by State DISCOMS and its impact on the power sector?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) : The Government of India has launched Ujwal DISCOM Assurance Yojana (UDAY) on 20-11-2015 for the financial and operational turnaround of state-owned Power Distribution Companies (DISCOMs). Participating States/UTs, have signed a Memorandum of Understanding (MoU) under UDAY, to reduce the gap between Average Cost of Supply (ACS) and Average Revenue Realized (ARR) to zero latest by 2019-20.

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(b) : The scheme aims to reduce the interest costs, reduce the cost of power and improve operational efficiency of DISCOMs by measures, which include States taking over 75% of DISCOMs debts as existed on 30.09.2015; efficiency measures such as coal swaps, coal linkage rationalization, supply of washed coal, etc. for Thermal power plants; Demand side management, feeder metering, segregation & improvement etc.

(c) & (d) : So far, Sixteen States (Andhra Pradesh, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, J&K, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Manipur, Punjab, Rajasthan, Uttar Pradesh, Uttarakhand and the Union Territory (Puducherry) have signed the Memorandum of Understanding (MoU) with the Government of India under UDAY. The participating States have issued Bonds worth 1,82,204.29 crores under UDAY and thus reduction in interest cost has already started. Cost of Power Generation is also on downward trend.

UDAY is an optional scheme for the States to join for achieving financial and operational turnaround of their DISCOMs. The Government of India has already explained the details to the States intending to participate under the scheme and also extended the timeline upto 31-03-2017 to facilitate their participation.

(e) : The scheme envisages that participating States take over 75% of DISCOM debt as on 30th September, 2015 over the periods 2015-16 and 2016-17. The DISCOMs would convert 25% of their balance debt into repriced loans/Bonds below a predecided maximum interest rate. This will result in significant reduction of the interest burden and cut down on losses of DISCOMS, which in turn, will have a positive impact on the entire Power Sector value chain.

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GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.3905
ANSWERED ON 08.12.2016

CSR OF DAMODAR VALLEY CORPORATION

†3905. SHRI RAVINDRA KUMAR PANDEY:

Will the Minister of POWER
be pleased to state:

(a) the details of the sanctioned, current and pending projects of Damodar Valley Corporation Limited and each of its subsidiary companies during the last three years and current year for corporate social obligation and skill development schemes, project-wise; and

(b) the details of the amount allocated and spent under skill development and corporate social obligation projects during the aforesaid period?

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER,
COAL, NEW & RENEWABLE ENERGY AND MINES

(SHRI PIYUSH GOYAL)

(a) : The project-wise details of the current and pending projects taken up under the Corporate Social Obligation Programme and skill development activities by Damodar Valley Corporation (DVC) during the last three years and the current year are given at Annexure.

(b) : The Year wise details of the allocation and Expenditure made for Corporate Social Obligation (Development) Projects is as under:

	Corporate Social Obligation (Development)	
Year	Allocation (Rs in lakh)	Expenditure (Rs in lakh)
2013-14	2356.39	1672.58
2014-15	1290.78	758.80
2015-16	1660.21	880.21
2016-17	1466.25	289.46 (till October,2016)

Besides this, an expenditure of Rs 12.60 lakh, Rs 42.16 lakh, Rs. 40.85 lakh and Rs. 20.24 lakh have been incurred for the years 2013-14, 2014-15, 2015-16 and 2016-17 respectively on Rehabilitation and Resettlement activities wherein skill development is a major component.

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ANNEXURE

ANNEXURE REFERRED TO IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 3905 ANSWERED IN THE LOK SABHA ON 08.12.2016.

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Development Projects

	Development of Drinking Water resources (Hand pumps tube wells) (In nos.)				Construction of Approach road/ link road (in Mtrs.)				Construction/Renovation of community buildings (Schools rooms / Community centre/ training centre/ community shed etc) (In nos.)				Construction of Households toilets/community toilets (In nos.)				Construction /renovation of irrigation resources. (In nos.)			
Financial Year	2013-14	2014-15	2015-16	2016-17 (till October, 2016)	2013-14	2014-15	2015-16	2016-17 (till October, 2016)	2013-14	2014-15	2015-16	2016-17 (till, October, 2016)	2013-14	2014-15	2015-16	2016-17) (till October, 2016)	2013-14	2014-15	2015-16	2016-17 (till, October, 2016)
Field Stations																				
Maithon	26	13	02	23	2500	900	-	905	8	2	01	05		42	93	80	3	-	-	02
Panchet	23	5	06	04	9800	1100	1600	700	5	-	-	03	2	40	-	67	3	2	-	-
CTPS Chandrapura	-	-	08	-	1100	-	-	06	5	-	-	-	8	42	16	-	4	-	-	-
BTPS Bokaro	-	22	-	14	2400	875	-	-	2	1	02	02	-	114	20	155	1	01	-	-
Konar	7	1	30	15	3200	-	-	-	-	-	-	07	-	93	-	110	3	-	-	-
Tilaiya	12	-	15	07	3500	-	-	-	-	-	-	07	-	94	-	84	2	-	-	-
KTPS Koderma	171	100	42	71	3200	4085	-	1240	-	02	-		-	42	30	75	-	-	-	-
DTPS Durgapur	-		-	20	340			350	5	-	03	06	-		20		-	-	-	
DSTPS Andal	24	-	05	11	1500	1000	2600	1500	4	02	02	06	-	32	100	106	-	-	-	02
MTPS Mejia	11	06	03	06	7400	8200	500	4000	2	--	04	02	-	250	-	161	3	-	-	-
RTPS Raghunathpur	6	-	08	03	4500	486	4500	2500	10	06	01	01	-	-	153	36	2	01	-	
Total	280	147	119	174	39440	16646	9200	11201	41	13	13	39	10	707	432	874	21	4	-	04

Skill Development activities taken up through Industrial Training Institute				
	Number of Beneficiaries			
Field Stations	2013-14	2014-15	2015-16	2016-17
CTPS Chandrapura	120*	120*	180*	136*
KTPS Koderma	82**	71**	46**	11***

* DVC Run Industrial Training Institute CTPS Chandrapura

** Government runs Industrial Training Institutes (Fully sponsored by DVC)

*** DVC Run Industrial Training Institute Domchanch, Koderma (In the building of Government of Jharkhand)

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